PHARMACEUTICAL HISTORIAN

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(Vol.1 ended at No.6)

Newsletter of the BRITISH SOCIETY FOR THE HISTORY OF PHARMACY

Contributions to the Editor: Owen H. Waller, F.P.S. · 17 Bloomsbury Square · London · W.C.1.

Conference Week-end 1971

CONTINUING the series of week-end conferences that began at Winchester in 1967 and was followed by similar events at Cardiff, Nottingham and Bath, the Society goes north this year to

NEWCASTLE UPON TYNE
APRIL 16 – 18

Theme of the conference is "Two Millennia of Pharmacy in the North East", and the papers will deal principally with two periods with which the city is outstandingly associated: the Roman occupation, when the city, so close to Hadrian's Wall, was one of the most populous of Roman centres in Britain; and the late eighteenth and early nineteenth centuries, when pharmacists in the area were prime movers in establishing the British Pharmaceutical Conference and when its manufacturers launched products that achieved world status and renown.

Presenters of papers at the conference include eminent historians as well as locally based pharmacists and the ex-president of the British Society for the History of Pharmacy.

All participants are being accommodated at the Swallow Hotel, Grainger Street, where all lectures and meals (apart from afternoon tea at Chollerford during the Saturday afternoon excursion) are being held.

The week-end opens with a reception (given by the Northumbrian Branch of the Pharmaceutical Society) and an exhibition at the hotel on Friday afternoon at 7.30.. Saturday morning's lectures are on "Regional Roman History", "Roman Medicines" and "Roman Pharmaceutical Equipment"; Sunday morning's on "Regional History", "Nineteenth Newcastle Chemists" and "Nineteenth-century Newcastle Pharmacists".

At the conference dinner on Saturday evening Professor P. Isaacs is giving an illustrated address. Participants return home after lunch on Sunday.

Members are receiving individually the detailed programme and booking form, The residential fee (£12.50 for a single room, £11.40 per person for a double) includes the cost of all meals and of the excursion. Non-members may obtain forms from the Secretary, 17 Bloomsbury Square, London, W.C.1.

The Society's President (Dr. M.P. Earles) will be in the United States at the time of the Newcastle conference, having been invited to take part in a visiting lecturer programme at the School of Pharmacy, University of Winsconsin, Madison. He will be spending a week on campus from April 18 and lecturing, and conducting seminars, in the history of pharmacy, history of pharmacology and therapeutics. During his stay he will be working with Professor Glen Sonnedecker, the Director of the American Institute for the History of Pharmacy.

During the Newcastle conference the Society's Vice-president (Dr. T.D. Whittet) will be occupying the chair.

OTHER FORTHCOMING EVENTS

WEDNESDAY, MAY 5. At Royal Society of Medicine, 1 Wimpole Street, London, W1M 8AE. Joint meeting of the Society with the Botanical Society of the British Isles and the History of Medicine Section, Royal Society of Medicine. Dr. Richard Hunter on "The Signature Book of the Royal Medico-Botanical Society". Dr. Basil Morson on "Some Letters of Sir Joseph Lister. At 5.15 p.m. Tea at 5 p.m.

TUESDAY Afternoon, SEPTEMBER 14. At the British Pharmaceutical Conference, Glasgow.
Session given over to Scottish pharmaceutical history.

MONDAY to FRIDAY, SEPTEMBER 20-25. At Prague, Czechoslovakia. Congress of the International Society for the history and Pharmacy. Papers on museology and on the history of pharmacy and related science. Speakers include Professor E.N. Shellard (Chelsea) on the history of the materia medica museum of the Pharmaceutical Society of Great Britain and on the history of academic pharmacognosy in Great Britain. Congress fee $2.5 payable to the Secretariat of the I.S.H.P., Sokolska 31. Prague 2, includes tour of Prague and excursion.

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History in the Pharmaceutical Press

THE Society's evening meeting at Bloomsbury Square on November 26, 1970, had a decidedly journalistic flavour, with the "Historian's" editor as speaker and the editor of the "Pharmaceutical Journal", Mr. Robert Blyth, as Chairman and part provider of the material.

Mr. Waller's theme was the way in which the pharmaceutical press, or part of it, had dealt with historical material, but his particular concern was with what had appeared in the now discontinued Annual Special Issues of the C. & D. However, he started at a much earlier point, namely the third issue of that paper, dateline November 1859, quoting from the first instalment of a "History of Chymistry":-

> We have oftentimes sought enjoyment, and felt the most exquisite pleasure, in rambling o'er the hills adjacent to our once loved rural retreat at morn, when
>
> *The glow-worm shows the matin to be near*
> *And 'gins to pale his ineffectual fire*
>
> and there watching the dawn of day. 'Some such pleasure as we have attempted to describe is experienced by the true lover of science in tracing its early history'.

A relative absence of historical articles thereafter lasted for twenty years, broken only by contributions on Hermes, the "father of alchemy", "Lavoister and the Metric System", "Jewish Folk Medicine", and "Moses Charas and his Pharmacy".

In 1890, commenting on a review, "Drugs in the Olden Days", the then editor wrote:

> We do not suppose that, among the subscribers to the "Chemist and Druggist" there are any misguided enough not to treasure and cherish their copies. But if there are let them be warned, in sorrow rather than in anger, of the splendid inheritance of which, by their shortsightedness, they are depriving posterity, for assuredly their descendants shall see the day when copies of the C. & D. shall be worth their weight in gold and when, say, our last special issue, if preserved intact, will represent an aggregate value, modestly calculated at the present prices of bullion, of about £900,000 in hard cash.

Any reader of the "Pharmaceutical Historian" who hears of old copies of the C. & D. changing hands at such prices is asked to pass on the information at once to the editor, who feels sure his readers will be most interested in it.

Of anything that could be considered as the prototype of the type of article that came eventually to be looked for in the A.S.I.'s, perhaps the nearest was "A Visit to Messrs. Evans & Co., Liverpool", since it included an illustration of "Where the firm started, 1933". Articles of similar type that followed over the years included "A Business Bell Founded" (on John Bell, Hills & Lucas Ltd.", "Christy in its Centenary Year", "Bourjois Centenary", "A Rubber Centenary" (on Thomas Hancock & Co. Ltd.) and "200 Years of Progress" (on Burgoyne, Burbidges & Co. Ltd.). In 1941 was published "The Wholesale Drug Trade, 1841-1941", and in 1959 Alan Duckworth's "Rise of the Pharmaceutical Industry".

Contributions strictly on the history of pharmacy began in 1927 with "Beginnings of Pharmacy", followed by "Mediaeval Politics and Pharmacy", "Early History of Pharmacy and the Apothecary in Scotland", "Sidelights on English Pharmacy", "Grocers, Apothecaries and Chemists", "Pharmacy before Printing", "Britain's First Pharmacy Act", "Royalty and Pharmacy in Scotland", "200 Years of Naval Pharmacy", "The First Chemist", "Pharmacy in Britain from 1959" and others.

Dr. Charles Singer's "Sketches in the History of British Medicine", given in four lengthy instalments between 1928 and 1930, were generally held to be a major factor in the popularity and prestige of the Annual Special Issues.

On many occasions there have been articles on the vessels and utensils used in pharmacy, especially bell-metal mortars and drug jars, including Miss Lothian's impressive series in the Fifties: "Bird Designs on British Drug Jars", "Angels on Drug Jars", "Cherub Designs on Drug Jars" and others. "Weights, Mets and Measures of Scotland" (1961) was from the pen of another of the C. & D's highly esteemed "regular" contributors, Mr. C.G. Drummond, a mine of information on all aspects of Scottish pharmacy.

The non-pharmaceutical side of most retail or general-practice pharmacists' interests prompted "Perfumery and Toilet Ware of Early Italy", "The Pomander and its Successors", "Perfumed Gloves", "A History of Modern Shaving", "Mediaeval Hair Dyes", "Beauty Through the Ages", "Perfume in Smallpox", "Infant Feeders" and "4000 Years of Infant Feeding".

Profiles of Sir Thomas Browne, Jenner, Boerhaave, Scheele, Schleiden, Linnaeus, Accum, Harvey and Jacob Bell are examples of many such, and mention should also be made of the series of "Reappraisals" (of Galen, Maimonides, Avicenna) from the pen of this Society's past-president Mr Leslie G. Matthews.

Many famous European and British pharmacies have been described, and many other articles fall less readily into categories but nevertheless add valuably to the knowledge of pharmacy's past.

In the "Pharmaceutical Journal" notable contributions were made by Professor Douglas McKie in his commemorations of the tercentenary of publication of Robert Boyle's "Sceptical Chymiste" and the centenary of Kekule's classic paper on the constitution of aromatic substances.

The history of the Pharmaceutical Society was the subject of a special issue on April 12, 1941, and the

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Examples of title and other pages from articles on historical subjects published in the Chemist and Druggist over the years, mainly in the former Annual Special Issues, and some in colour.

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centenary of the death of Jacob Bell of a supplement in 1959. The Society's house, itself steeped in history, was the material for a colour supplement in 1963; it might come to have a considerable value if the threat to the continued existence to No.17 should materialise.

More recently the P.J. has been presenting a monthly series on "Pharmaceutical Antiques", supplemented by displays in the Society's house of the items dealt with.

Mr. Waller gave it as his opinion that, for systematic study, the pharmaceutical press cannot provide all that is required. An editor's approach is not that of a historian and he may choose to print an article for other purposes than historical record. However, the concentration of periodicals on current events makes their back numbers invaluable source material in their own right after a lapse of time.

The indexes that follow may be useful to some. No claim is made that that of the C. & D. articles is complete, or that that of the P.J. goes further back than 1963. Back numbers of the "British and Colonial Pharmacist" and "Pharmacy Digest" may yield similar material.

Some of the historical articles that have been published in the CHEMIST AND DRUGGIST, 1859–1970

Aberdeen pharmacy. An historic 1935, July 30, p.93.
A business Bell founded (John Bell Hills & Lucas). 1959, June 6, p.614.
Accum, Frederick, operative chemist. 1937, June 26, p.767.
Advertisements. Bygone medical, *Howard Bayles.* 1941, June 28, p.378.
Advertisements. Some early Press. 1930, June 28, p.833.
Alchemy in Scotland, *John Read.* 1938, June 25, p.743.
Alchemy with music. 1937, August 21, p.236.
Alchemy without tedium. 1937, January 2, p.17.
Amsterdam. The old Sheep pharmacy in. 1928, June 30, p.849.
Apothecaries, grocers and druggists. 1938, June 25, p.767.
Apothecaries, Jane Austen's. *Kalamos.* 1954, June 26, p.646.
Apothecaries of Old France. *Ernest J. Parry.* 1939, June 24, p.675.
Apothecary, an anonymous. *C. G. Drummond.* 1958, June 28 p.692.
Apothecary, from, to pharmacist (first of series). 1962, June 10, p.734.
Apothecary, pedlar. 1956, June 30, p.601.
Apothecary, Royal, notes on accounts paid to the, in 1546 and 1547. *Howard Bayles.* 1931, June 27, p.794.
Apothecary's bills, a 17th century. 1935, March 30, p.386.
Apparatus, pharmaceutical, of other centuries. 1930, June 28, p.817.
Arabic medical manuscript, an. *O. Zekert.* 1934, June 30. p.728.
Ashmolean. In the old. 1937, June 26, p.748.
Avicenna reappraised. *L.G. Matthews.* 1960, June 25, p.789.
Assyrian pharmacy. 1924, June 28, p.939.
Baildon's of Edinburgh. *C.G. Drummond.* 1959, September 9, p.21.
Bears' grease pot lids. 1951, June 30, p.854.
Beauty through the ages. *Geoffrey Rhodes.* 1938, June 25, p.735, and 1939, March 25, p.351.
Bell founders, Some English. *Agnes Lothian.* 1958, June 28, p.705.
Bell, Jacob. *L.G. Matthews.* 1959, June 6, p.611.
Bloomsbury pharmacies, vanished. *Laurence Dopson.* 1954, June 26, p.644.
Boerhaave, Hermann. *William Kirkby.* 1938, July 30, p.109.
Book plates, pharmaceutical. 1920, June 26, p.892.
Book plates, some old. 1904, July 30, p.216.
Botanical Gardens, London. 1923, June 30, p.919.
Bourjois centenary. 1940, December 7, p.302.
Brighton, Centenary celebrations at. 1939, June 17, p.655.
Bristol Royal, history at. *Laurence Dopson.* 1956, June 30, p.622.
British Pharmaceutical Conference, a history of. *E.H. Shields.* 1960, June 25, p.783.
Bruges, A hospital pharmacy in. 1928, June 30, p.848.
Burgoynes. 200 years of progress. 1941, March 15, p.172.
Chemicals, British fine, 1921-34. 1934, June 30, p.774.
Chemist. The first. *R.M. Khan.* 1955, June 25, p.721.
Chemists to Royalty (Savory & Moore). *Laurence Dopson.* 1953, June 6, p.570.
Chemists' Shops, London, state of, in the 17th and early 18th centuries. *Laurence Dopson.* 1955, June 25, p.718.
Cinchona. 300 years of. *E.M. Holmes.* 1930, June 28, p.827.
Christ as the pharmacist. *F. Ferchl.* 1930, June 28, p.815.
Christy, Thos & Co. Ltd., in their centenary year. 1960, June 25, p.794.
Chyrurgion, A Wisbech. *Philip George.* 1955, June 25, p.713.
Clinical thermometer. Evolution of the. 1936, August, 29, p.252.
Commercial travelling. 200 years of. *John Camp.* 1952, June 28, p.928.
Compendium. A 19th century. 1938, August 20, p.195.
Devil Upon Dun (rhymes). 1955, June 25, p.723.
Dispensaries. Changing ideas of. 1937, April 3, p.401.
Doctor's oath, the. 1925, June 27, p.957.
Druggists, grocers and apothecaries. 1938, June 25, p.769.
Drug jars. Angels on. *Agnes Lothian.* 1955, June 25, p.733. Cherub designs on. 1956, June 30, p.609. English, Bird designs on. 1954, June 26, p.672. Two centuries of dated. 1962, June 30, p.722
Drug jars. Some inscribed London. *Agnes Wyatt.* 1938, June 25, p.755.
Drug markets, London (and the romance of Mincing Lane). 1928, June 30, p.851.
Drugs, A century of commerce in. 1959, Centenary issue, p.160.
Drug trade, wholesale. 1941, April 12. p.232.
Edinburgh. Baildon's of. *C.G. Drummond.* 1959, September 9, p.21.
Eldridge the Norwich artist. *L.G. Matthews.* 1956, June 30, p.620.
Electric blanket. Forerunners of the. 1958, June 28, p.690.
Elizabethan chemist, An. *Howard Bayles.* 1928, June 30, p.808.
Emulsions. Early experiments in. 1940, June 29, p.475.
Europe. Oldest pharmacy in. 1936, June 27, p.784.
First aid in ancient times. 1939, June 24, p.714.
First Aid, organised. 1939, June 24, p.714.
France. Apothecaries of old. *Ernest J. Parry.* 1939, June 24, p.675, July 1, p.18.
Friar's balsam – or friars' balsam. *C.G. Drummond.* 1955, June 25, p.687.
Friends (Quakers) in Pharmacy. 1961, June 24, p.659.
Friends of a Lifetime (firms in existence in 1859 and still going). 1959, Centenary issue, p.188.
Galen Reappraised. *L.G. Matthews.* 1959, September 9, p.7.
Gaper. Mortar and. *P. Van der Wielen.* 1930, June 28, p.809.
Glass, metal, pottery, wood. *C.H. Spiers.* 1962, June 30, p.715.
Gloves, perfumed. 1937, March 20, p.341.
Government laboratory. 1935, June 29, p.787.
Grocers, apothecaries and druggists. 1938, June 25, p.767.
Guy's hospital and its pharmacists. 1925, June 27, p.979.
Hair dyes, mediaeval. 1939, March 25, p.332.
Hall, John, of Stratford-on-Avon. 1936, March 21, p.341.
Harvey, William. *Charles Singer.* 1957, June 29, p.723.
Heart-tonics: A retrospective study of their physiological standardisation. 1916, July 29, p.803.
Henry VIII and pharmacy. *S.G. Blaxland Stubbs.* 1930, June 27, p.792.
Henry VIII. From the still-room of. 1937, March 20, p.350.
Herbals. From two early. 1936, August 1, p.128.
Herbals, old, and herbalists. *C.C. Bell.* 1922, June 24, p.161.

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Historical articles in the PHARMACEUTICAL JOURNAL, 1963–70

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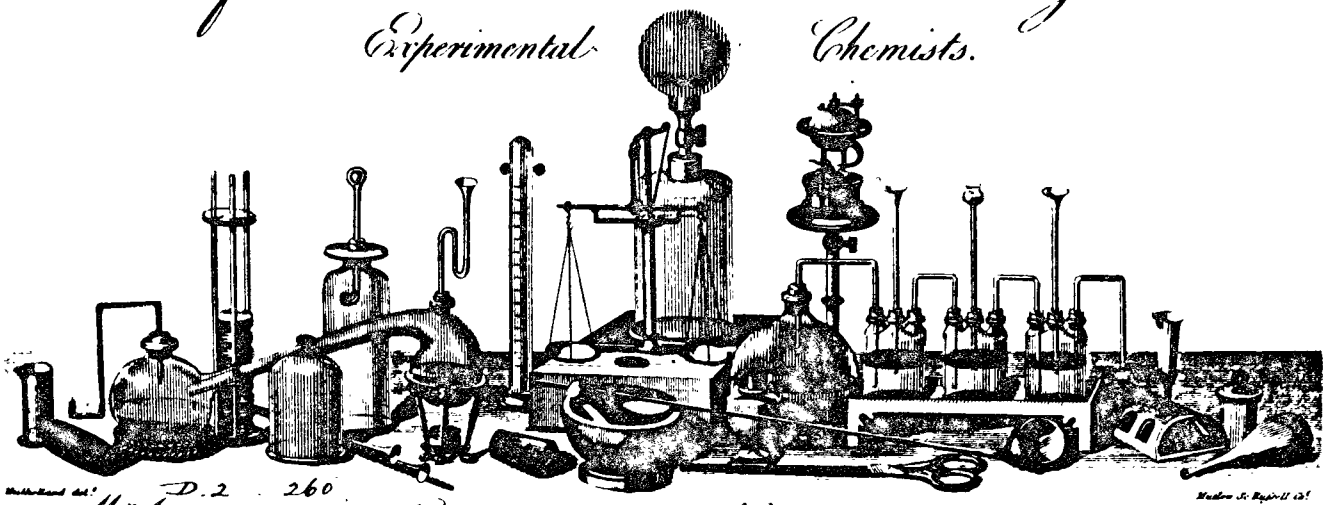
At Earl Grey —— London: 11. Compton Street, Soho. 1814

B.ts of Fredrick Accum; and Alexander Garden,

Experimental Chemists.



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Mr. Accum acquaints the Patrons and Amateurs of Chemistry that he continues to give private Courses of Lectures on Operative and Philosophical Chemistry, Practical Pharmacy, and the Art of Analysis, as well as to take Resident Pupils in his House; and that he keeps constantly on Sale in as pure a State as possible, all the Re-Agents and Articles of Research, made use of in Experimental Chemistry, together with a compleat Collection of Chemical Apparatus and Instruments calculated to suit the convenience of different Purchasers. Philosophical Gentlemen residing in the Country or Abroad, desirous of becoming Purchasers of large or small Collections of Chemical Preparations &c. may have explanatory Lists previously made out agreeably to the Expense they are willing to incur, and Chemical Catalogues may be had at the Laboratory Old Compton Street, Soho London.

Billhead of Frederick Accum (1769–1838) and Alexander Garden, experimental chemists, London. Frederick Accum was the subject of an article in the Chemist and Druggist Annual Special Issue of 1937.

Billhead of a former Yorkshire chemist. J.W. Usher, chemist, druggist, oil and colourman promised "Physicians prescriptions and family recipes accurately prepared". He offered "Drugs and chemicals of the purest quality. Spices, pickles, fish sauces, soda and Seidlitz powders. Soda water, Havannah and Cuba cigars, wax and composition candles. Horse and cattle medicines.

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1841 The Pharmaceutical Society of Great Britain 1941

100 Years ago

chemists and druggists held their meetings at various London inns They met at the Freemasons' Tavern in Queen Street off Lincoln's Inn Fields, at the Globe Tavern in Fleet Street, and at the Crown and Anchor Tavern in the Strand It was at this last inn that the declaration was signed by nearly one hundred members inaugurating, on April 15, 1841, the Pharmaceutical Society of Great Britain

A few months after its foundation, the Society leased for its headquarters a typical Georgian terrace house, No 17 Bloomsbury Square It was on the west side of the Square, next but one to Great Russell Street, and had previously been a residence reported to have been occupied at an earlier date by the Sardinian Ambassador. No. 17, together with the last house in the terrace and the one adjoining it in Great Russell Street, although internally distinct, had outwardly the appearance of a single large corner house. This effect, which remains substantially unchanged today, was produced by a

Page from article on the Pharmaceutical Society's headquarters published in the special issue of the Pharmaceutical Journal celebrating the Society's centenary, April 12, 1941.

FLASHBACK. A C & D cartoon of 1879 satirises a proposal by Pharmaceutical Society's Council to increase the membership fee. The artist was W.R. Brackenbury of Middlesbrough, then three years qualified and later a prime mover in the campaign that led to the introduction by the Society of the Statement upon Matters of Professional Conduct.

The Society's Transactions

DURING 1969 the committee of the Society decided to publish, in addition to the Pharmaceutical Historian, a series of *Transactions,* each an important contribution to the printed records of pharmacy and selected by expert assessors as being outstanding in scholarship and historical accuracy.

The first member of the series appeared in mid-1970, its contents an annotated study of an Exeter apothecary of the period 1560 to 1600 and a treatise on how leprosy was diagnosed and treated in Wales and the Border region in the Middle Ages.

Many copies have been bought, both by members at the privilege price of 12s 6d and by non-members at the face price of 16s. Any member who has not yet acquired a copy should do so without delay, as the publication is eminently readable and informative.

Copies may be obtained from The Secretary, British Society for the History of Pharmacy, 17 Bloomsbury Square, London, W.C.1.

Members who already possess copies will agree that the *Transactions* are worth making as widely known as possible. The more quickly the edition is sold out the better for the Society's capacity to introduce new titles in the series. Some are already in course of preparation.

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Pharmacywith a Tyneside tang

RATHER fewer members went to Newcastle for the week-end conference in April than were present at Bath last year.

For the two dozen or so who did go the event was both enjoyable and productive. The general title, "Two Millennia of Pharmacy in the North-east", had seemed threaten something of a mad rush. Two thousand years in a day and a half!

As it turned out, most of those years were left unmentioned, perhaps held over for a future occasion. Hadrian's wall and what it could yield of pharmaceutical interest occupied most of Saturday, both indoors and out, and Sunday morning was given over to nineteenth-century Tyneside and the re-enactment, within a decade from today, of some of its industrial activities in a new kind of museum now being organised in the area.

But in order to be in their places at the Saturday sessions the visitors had first to arrive, and they were given a warm welcome by the local branch of the Pharmaceutical Society on Friday evening. The reception the Branch put on, and at which the Pharmaceutical Society's president (Mr. W.M. Darling) was among those who "received", was made additionally memorable by reason of a specially staged exhibition of objects of pharmaceutical and local interest.

There were splendid specie jars to be admired, a poison bottle of eccentric shape to be speculated about, wooden bottle-holders to be handled, the 1897 minutes of the Newcastle Chemists' Association to be perused, meticulously drawn lithographs of foraminiferae (due for mention later in one of the sessional papers) to be inspected, and a sequence of stereoscopic scenes and groups, pharmacists in some to them, to be looked at through the eyepiece of a Victorian or Edwardian brass-and-mahogany viewer.

A further "bonus" of the week-end was a slide lecture after Saturday evening's dinner, its subject an Alnwick chemist of the early 1800's who contrived to conduct at the same time a successful pharmacy and a printing business. (Lecture Summary in next issue of the *Historian)*

Add that there was general approval for the innovation of staging the sessions within the hotel at which visiting members were staying (and where the food was so good) and you have a recipe for attracting much larger attendances at future week-end conferences.

Special credit should go to principal local organiser, Mr. A. McGuckin, despite his denials that he exercised any unique skill either in doing so or in presenting the paper summarised on another page.

A higher "sub"

The third annual general meeting of the Society, held at 12 noon on April 17, was little more than a formality, except for the decision to raise the annual subscription.

The Vice-president (Dr. T.D. Whittet) was in the chair and the Honorary Secretary (Dr. J.K. Crellin) presented the annual report.

He recalled that the Spring evening meeting, 1970, had not been held, owing to alterations in the Pharmaceutical Society's house, but that the Autumn meeting, week-end conference (Bath, April 10-12), history session of the British Pharmaceutical Conference (Leeds, September 15), and third meeting on pharmaceutical antiques (York, October 31 and November 1) had duly taken place, all of them well supported.

During 1970 there had been three issues of the *Pharmaceutical Historian,* and the first issue of the Society's *Transactions* had become available; arrangements were in hand for the second.

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During the year, too, the Society had become a constituent member of the British Society for the History of Medicine.

Financial and administrative help from the Pharmaceutical Society was appreciatively acknowledged, with warm personal thanks to Miss J.L. Millward.

The meeting ratified the arrangements entered into, the text of which had been circulated, for future history sessions at the British Pharmaceutical Conference.

When the Treasurer (Mr. J.C. Bloomfield) presented the accounts and balance sheet for the year, he had to report for the first time a deficit (of about £26). Membership had remained static, he said, but efforts were being made, through newsletters of the Pharmaceutical Society's branches and otherwise, to raise it to at least 200.

The Treasurer then moved "That the annual subscription for membership of the British Society for the History be increased to £2 as from January 1, 1972". The motion was carried.

From the floor, Mr. L.G. Matthews asked whether arrangements might be made for impending pharmacy closures to be notified to the Secretary, so that contents of historical importance might be preserved or at least recorded. The platform undertook to look into the possibility.

Hadrian's wall and its hospitals

FOR the Saturday morning session, the general theme of which was medicine and pharmacy in Roman times Dr. Davis (lecturer in history, Sunderland College of Further Education) set the scene, outlining the fortunes of the Roman occupants of the Empire's remotest province, Brigantia, after it had become a client kingdom of Rome.

For conference purposes the story may be said to have hinged on Hadrian's wall, along whose 80-mile length were constructed, in addition to the "mile-castles", each with barracks for twenty-four men, seventeen much larger forts each containing a hospital. Dr. Davies showed the plan of the hospital, comprising courtyard, reception rooms, operating theatre, preparation rooms, dispensary and mortuary.

Apart from the surviving parts of the hospitals themselves, excavations have yielded little in the way of instruments, apparatus or medicaments, but from similar sites in Germany have been recovered, among other things, medicinal herbs and figs, lentils and oysters used as sick diets.

Part of a dedication slab found at Binchester, co. Durham, in 1879, it reads: "To Aesulapius and Salus for the welfare of the Cavalry Regiment of Vettonians, Roman citizens, Marcus Aurelius [...] ocomas, doctor, willingly and deservedly fulfilled his vow."

[Reproduced from R.P. Wrights' *Roman Inscriptions of Britain*. Vol.I (Clarendon Press) by kind permission of the author and publishers].

There are traditions, though no proofs, that herbs were grown in the vicinity of the Northumberland forts, but there is concrete evidence, open now for visitors to the wall to inspect, of the efficiency of the sanitary arrangements, demonstrating the importance the Romans placed upon hygiene.

Medicines of Roman times

IN the second Saturday-morning paper Dr. Betty Jackson (Sunderland College of Technology) dealt with her subject "Roman Medicines" under two heads: the ingredients and how they were used.

Roman medicine was based, she said, upon Greek medicine. It was introduced into the Empire during the first century. By that time the precept of Hippocrates ("Give Nature a chance and the diseases will cure themselves") found no general acceptance. Superstition and magic had crept in, which many Romans tried to eliminate, not with any permanent success.

The writings of Celsus threw some light on the medicine of the period but most of the information came from the herbal of Dioscorides, dated at about 50 A.D. Dioscorides, a Greek, lived in Rome but travelled with the Roman armies and studied the local flora wherever he went.

His herbal gives lucid descriptions of 500 species and parts of plants and of 70 animal and 50 metallic substances. The iris, for example, "bears leaves like unto a little sword, greater and broader and fatter. The flowers on the stalk are bended in, one against another and divers, for they are either white or pale or black or purple or azure", etc.

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The plants described were mainly, as one would expect, from the Mediterranean basin and Near East, but they included rhubarb and cardamom from further away. Many of the herbs, among them dill and fennel, colocynth and coriander, are still in use today.

On the whole the plants are innocuous, though hemlock is mentioned, as well as datura and stramonium.

The illustrations projected by Dr. Jackson were from the 1512 reissue of the herbal. There is no proof that they were in the original though some resemble the drawings of another herbal of the period.

Medicinal substances used by the Romans included:–

FIXED OILS (castor, olive, mustard). Obtained by pounding the plant in a mortar, macerating with hot water and skimming off the oil; or by putting the pounded material into baskets and squeezing out the oil in a press.

VOLATILE OILS. Obtained not at that time by steam distillation but by drawing them as a concentrate from seething pitch by pressing wool upon it; or by macerating the herbal material in fixed oil and wine, agitating it twice a day for thirty days, and straining off the liquid.

RESINS AND GUMS (tragacanth, myrrh, benzoin, frankincense).

FULIGOS (concentrates or "soots", for example of benzoin).

MOULDS, such as dry rot, used by laying upon ulcers.

ANIMALS (porcupines, mussels or snails used as ashes or roasted and applied; frogs soaked in oil and salt and applied to wounds).

ANIMAL PARTS. Lungs of fox (as ear drops). Goats hooves (roasted). Elephants' teeth (ground). Old leather (burnt, beaten to powder, and laid on to help in skinburn, intertrigines and gallings caused by the wearing of shoes). Milk. Butter. Whey. Wool. Wool fat. Suet, Lard. Bear's grease, Aromatic fats prepared with cassia, cinnamon, cardamom, iris, etc. Blood, urine, dung. Honey, sugar, beeswax.

WINES, VINEGAR, WATER (spring, rain, sea).

MINERAL SUBSTANCES. Calamine. Verdigris. Iron and lead ores. Copper carbonate. Chalk, gypsum and lime. Blacking and soot. Sulphur (either "that has never felt fire" or "green and very fat"). Asbestos. Antimony sulphide.

Most Roman medicaments were for external use. Among them were:–

OINTMENTS. Applied only to unbroken skin. Plant materials were crushed, mixed with a base and softened with castor oil.

PLASTERS. Used on broken skin. Ingredients were usually metallic, ground to a fine powder.

PASTILLES. In pastilles for use on broken skin no liquids were used. Pastilles for internal use were made into a paste with wine, and divided. Each weighed 0.66 gm.

PESSARIES AND SUPPOSITORIES. Medicaments were taken up in soft wool or incorporated in a wax base.

LOTIONS AND LINIMENTS. Ingredients were soaked in wine, vinegar, honey water, etc., and strained.

EYE DROPS AND LOTIONS AND EAR DROPS. Many were in use. One example: Frankincense and pitch.

DECOCTIONS. Made by soaking medicaments in vinegar, wine, water, etc., and blended with honey. Or roots were ground until smooth, put in wine as balls, and taken before breakfast.

GARGLES were used but no formulas are known.

PILLS, ANODYNE. Used only in overwhelming necessity. Ingredients were pounded, moistened and massed. Suitable sizes were then cut off.

LINCTUSES (for example horehound and honey), and a TONIC of quince syrup are mentioned.

Apparatus of Roman pharmacy

IN the third paper of the session Mr. L.G. Matthews described "Roman Pharmaceutical Equipment". In Rome in the second century, he said, there was a gradual introduction of Greek physicians, brought in as prisoners of war.

Different systems arose as medicine progressed. The Dogmatics were believers in the orthodox. The Empirics relied upon observation, history and analogy. The Methodists took a middle course, and the Eclectics took what they thought best in the other schools. The Stoics, who tended to disregard pain, may have been close to the faith healers or our own day.

Many practitioners were without training. When the Schools of Alexandria were in full swing, courses of training for physicians were instituted.

Not until the first century A.D. were many doctors employed in the Roman army. Treatment, such as it was, was generally given by fellow soldiers *(medici ordinarii)*, who knew a little about binding up wounds.

Below the medicus ordinarius was a *capsarius*, a dresser who carried the *capsa*, a round box containing bandaging material.

When military physicians were appointed the number for a cohort of 1000 was four. They were responsible to a *medicus legionarius* or to a *praefectus castrorum*. No doubt some served in military hospitals *(valetudinaria)*, under a senior officer.

A number of valetudinaria have been excavated and

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the detailed plans of many are known. They show that small wards led off corridors in large buildings. From few have instruments been recovered, though one near the Rhine had a well stocked apothecary shop.

Roman army doctors had to deal with sword and javelin thrusts, wounds from barbed poles, sling stones and arrows. Celsus *(De Medicina)* gives directions for extracting arrows by means of a special instrument. Anaesthetics there were none except that alcohol and opium were known.

Scribonius Largus, a physician who accompanied the Emperor Claudius to Britain, gave directions for preparing opium by slitting the capsule and allowing the juice to dry and to be made into balls.

The excavations of Roman settlements in Britain have yielded little that can be identified as pharmaceutical, though there are many light buff-coloured shallow pottery vessels, 8-12 in. in diameter and usually spouted for pouring, that are known as *mortaria.* There are also shallow dishes of hard basalt that were used with a rubber of stone for grinding. Mortaria were likely to have been used also for pulverising herbs or making sauces. Of the filled complete examples few remain.

Pestles were usually long, conical and tapered, and of stone or marble according to the kind of material from which the mortar was made. For shallow mortars a short right-angled or elbowed pestle was commonly in use.

Excellent examples of Roman infant feeders, both pottery and glass, are to be seen in museums.

Items in silver include medicine spoons, drug boxes, bleeding cups and strainers. Spatulas were mainly of bronze or bone. Bronze spatulas, either leaf-shaped or square-ended, even double-ended, might also be used as tongue depressors. Bone was used for large syringes and for cone-shaped cupping instruments.

Scribonius Largus, in his *De Compositione Medicamentorum,* written just before he came to Britain, mentions many kinds of preparations.

PASTILLES for head pains were either lozenges or small round cakes. Heavy pastilles of bitumen or myrrh were for the treatment of nasal polyps.

Two kinds of PILLS are recorded: *catapotia* and *globuli,* the latter the size of a bean.

There are formulas for many kinds of PLASTERS, which would have been spread on linen or leather.

For making an OINTMENT of honey, turpentine and rose water, a double vessel (water bath) was needed. Largus gives instructions for the careful storage of drugs and herbs to preserve their activity.

BALANCES for pharmaceutical use were mainly of two kinds: a beam variety with two scale pans and a small steelyard with single scale pan.

WEIGHTS AND MEASURES. The Roman pound *(libra)* of approximately 5000 grains was divided into 12 ounces *(uncia);* the ounce into sixths *(sextarii);* the sixth into 4 scruples *(scripula)*; each of 17.2 grains; and the scruple into 6 *siliqua,* each of 2.87 grains. The capacity of the Roman gallon *(congius)* was approximately 120 fl. oz. The gallon was divided into 6 *sextarii,* each equivalent to an English pint.

Galen used celandine to strengthen the eyes and said it could be pulverised with a stone before mixing it with vinegar. The preparation was to be infused gently into the eye, using a tube or "the more familiar instrument, an ear syringe".

Vessels of various kinds were wanted for macerating honey and vinegar, sometimes with water, to make oxymels, apomels and hydromels. A mashing vessel was used for mashing figs with saffron.

Both Largus and Galen mention the use of water baths. Galen in particular took pride in his accomplishments as a practical pharmacist.

Nineteenth-century pharmacists of Newcastle

IN a paper entitled "Nineteenth-century Pharmacists" Mr. A. McGuckin was able to present substantial portraits of five nationally known figures, and to make brief mention of five other pharmacists born within the century, plus one from the eighteenth.

On the principal five three were North-easterners by birth. The earliest, as well as the one to survive the longest, was JOSEPH WILSON SWAN, born in Sunderland in 1828. Swan entered upon an apprenticeship at a Sunderland pharmacy but, after three years and before it was completed, the proprietor died.

He then joined John Mawson at The Side, Newcastle, eventually becoming his partner and brother-in-law. Mawson, recognising the boy's genuis, allowed him considerable latitude to follow his own devices.

Swan was intensely interested in photography, and made important discoveries in collodion manufacture, carbon printing, bromide papers, and dry plates. In the latter part of the century Mawson & Swan was among the most important manufacturers of photographic supplies.

Swan achieved a separate prominence for his invention of the incandescent electric lamp. His priority was challenged by the American inventor Edison, who, however, was persuaded not to try and beat Swan but to join him, with Ediswan lamps as the profitable outcome.

Swan is credited with sixty or more inventions, none directly connected with pharmacy. Yet from 1867, when Mawson lost his life, to 1881, when Weddell

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came into the business, his main concern was the running of Mawson & Swan.

In 1881 he was made a Chevalier of the Legion of Honour. A succession of distinctions followed. He was elected a Fellow of the Royal Society in 1894, knighted in 1904, president of the Institution of Electrical Engineers in 1898, of the Society of Chemical Industry in 1901, and of the Faraday Society in 1903.

Though after 1881 he had no active association with pharmacy, he gave his "Reminiscences and Reflections" in an address to the School of Pharmacy in 1903, and – rather strangely since he was already a member – was accorded Honorary Membership of the Pharmaceutical Society. He died in 1914.

BARNARD SIMPSON PROCTOR, born in Newcastle in 1829, is understood to have maintained that he never wanted to be a pharmacist. With, however, a pharmacist grandfather, John Proctor, born in Dundee but in business in Newcastle since 1768, and a pharmacist father, William Proctor, Sheriff of Newcastle in 1838, carrying on the pharmacy at The Side, he seems to have had little choice. As, however, Barnard Proctor qualified at 19, and certainly left his mark on the profession, the family may not have been so wrong in their insistence.

As an apprentice he made friends with Swan and with Henry Bowman Brady, and they made an outstanding trio. All were among the twenty-five pharmacists who, at the termination of the British Association meetings in Newcastle in 1863, established the British Pharmaceutical Conference and, later in the same day, held the first meetings and heard the first paper: by B.S. Proctor on "Weights and Measures".

When he qualified, Barnard Proctor was persuaded by Peter Squire to go right on to take the Major, which he not only passed, but passed with honours. He made frequent contributions, both scientific and political, to pharmaceutical literature, and some of his ideas were well ahead of their time. Indeed, one paper, dealing with the remuneration of pharmacists, he was refused permission to present to the Conference.

Appointed lecturer in pharmacy at the College of Medicine, University of Durham, he wrote "Lectures in Pharmacy", which became a standard textbook for pharmacy students generally for many years, as did his manual "Pharmaceutical Testing". At Durham he was offered an Arts degree, but rejected it.

Proctor was a member of the Pharmaceutical Society's Council, 1863-64, of the Board of Examiners, 1867-69, and President of the Chemical Society in 1882.

He remained at his pharmacy till he was 69, apparently taking a rather dim view of the ability of the younger pharmacists to succeed him. Eventually, however, he thought he had found the right man in Thomas Maltby Clague, and in 1898 retired to Westbury-on-Trym, nr. Bristol.

HENRY BOWMAN BRADY, son of a Gateshead physician, was born in 1835 and from an early age showed a great interest in natural sciences. He served a four-year-apprenticeship with a Leeds chemist, and in 1855, still not 21, passed the Pharmaceutical Chemist examination and at once acquired a pharmacy in Newcastle.

That he expanded into a group of retail and wholesale enterprises and in 1875, having taken on Nicholas Henry Martin as partner, retired at the age of 41 to pursue his interests in science and travel.

From his early years Brady was an expert with the microscope. His papers "Microscopic Research in Relation to Pharmacy" and "Micro-chemical Examination of Flesh" command admiration, but his magnum opus was probably the two bulky volumes forming part of the zoological series recording the scientific results of the voyage of H.M.S. Challenger, 1873-76, with its accompanying volume of lithographs containing 5,500 individual examples drawn with fastidious care.

Brady was first treasurer of the Conference, its Chairman in 1872.

He was a member of many foreign societies, including the American Pharmaceutical Society, the Pharmaceutical Societies of St. Petersburg and Vienna, the Philadelphia College of Pharmacy and the Leeds and Newscastle Philosophical and Literary Societies. He was a member of Council of the Royal Society in 1888 and a member of the Pharmaceutical Society's Council for two years.

He took extensive trips abroad, visiting Morocco, Tunisia, the United States, China, New Zealand, Australia, Japan, India, Borneo and numerous Pacific islands. He died in 1891.

JOHN MAWSON (1815-67) settled in Newcastle in 1840 from Lowther, Penrith, Cumberland, where his father was an architect to the Earl of Lonsdale.

After completing his apprenticeship to a Penrith chemist, he went as an assistant to Mr. Ritson, chemist, in Sunderland, and then set up on his own account in that town. Persuaded then to act as guarantor for a business venture that failed, he had to be declared bankrupt but later settled his debts. By that time he was again in business, this time at The Side, Newcastle, close to the Proctor pharmacy. Swan joined him and became a partner. The Mawson & Swan business shortly removed to Mosley Street, not far from the pharmacy of H.B. Brady.

Mawson, who had a considerable talent for choosing the right man, founded other businesses: an art gallery and shop in Grey Street (Mawson, Swan & Morgan), a business in German yeast (Mawson, Swan & Carter) and an oil business (Mawson, Swan & Clark).

A member of the City Council for a number of years, he was made Sheriff of Newcastle in 1867, but in that capacity was called upon to dispose of a quantity of nitro-glycerin found stored in premises in the Groat

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Market. It was removed to the Town Moor to be buried when a navvy attempted to knock off the lid of a drum with a pick and in the resulting explosion Mawson and seven others were killed.

NICHOLAS HENRY MARTIN, born in Cornwall in 1846, studied pharmacy at the Society's school, became an assistant to Henry Deane, Clapham, and in 1875 joined H.B. Brady in Newcastle, the firm becoming Brady & Martin. In charge of that business, Martin made his own reputation in the scientific world.

He served a term as President of the Society of Chemical Industry, to whose transactions he contributed many valuable papers. He was a strong believer that pharmacy was a profession, and few pharmacists of his day did more to discourage the trading element.

In 1894 he was Chairman of the British Pharmaceutical Conference at Oxford and again in 1895 at Bournemouth. "Many of his speeches seem to indicate that he was a rigid, high-minded, stubborn, forceful character".

Martin deprecated the development of the proprietary medicine system. Secret remedies, he argued, would be the damnation of pharmacy. "When will English medicine have the courage to purge itself of this corruption?". He proclaimed the company pharmacist "the most abominable pharmaceutical atrocity of the 19th century".

GEORGE WEDDELL, born and apprenticed in Kelso, spent some time as an assistant with Mawson & Swan, gained further experience in France and as a traveller for Burgoyne Burbidges, and was brought back by Swan in 1881 as partner in Mawson & Swan. He was given charge of new premises in Grainger Street, taken after a fire in the Mosley Street shop.

Weddell took an increasing share in the business and by 1901 was the principal shareholder. He put on the market under the name Cerebos a non-deliquescent table salt that had been developed in Edinburgh by a Mr. Bowis, and the exploitation of that venture occupied so much of his time that he merged his business with that of Proctor, thus starting the business of Mawson & Proctor. He died in 1916 at Seaton Carew and was buried at Greatham, headquarters of Cerebos for many years.

THOMAS DALGLEISH, who founded the business of Dalgleish and Ismay (later John Ismay) was so interested in extending vaccination against smallpox that in times of epidemic he would vaccinate all comers, sometimes 300 to 400 a day, free of charge.

JAMES CROSSLEY ENO, who was to a great extent responsible for the development of the effervescent health-salt trade, commenced in business in Newcastle.

THOMAS MALTBY CLAGUE, probably one of the few people to organise two Conferences in his own town, was well known for his work on eradicating lead poisoning and phossy jaw from the community.

Human aspects of a Tyneside industry

THOUGH strictly his title was "Nineteenth-century Newcastle Chemists", Mr. W.A. Campbell (reader in organic chemistry, University of Newcastle), announced his intention of dealing rather with the human aspects of the North-east's chemical industry.

During the latter half of the 18th century, he said, the innovation of the steam engine and its application in the making of textiles called for vastly increased production of bleach, soap, washing soda and colouring matters.

Much of the pioneer work was carried out at Tyneside, which by the middle of the 19th century was supplying about half the chemicals used in the textile and glass industries. In the production of alkali hydrochloric acid was given off into the atmosphere in immense white clouds, and calcium sulphide was washed into the river or left in spoil heaps. By 1863 the pollution problem was to some extent resolved by legislation.

Many of the works were located close to the river, from Blaydon almost to its mouth. They were run by anyone with enough capital to purchase a small plot of land and build a few huts. Among the workers drunkenness was common. The lower operatives were usually unfit for any other type of work, the more skilled, especially the bleach-packers, an *élite* whose judgment as to when a process had reached completion was all-important in influencing profitability.

When, in the bleach works, the time came to enter the chambers and shovel out the products, the "correct" safeguard against the excess of chlorine within was to grease the hands and feet, put brown paper round the trousers, and swathe the face in flannel, but commonly the precautions were disregarded.

Prevention of pollution, as required under legislation, was expensive, so large groups emerged (Jarrow Chemical Works, Tennants of Hepburn, Allhusens of Felling, Attwoods of Gateshead and Pattison of Felling). To repair their lead chambers, Pattison engaged John Glover, an apprentice plumber who studied chemistry at the Mechanics' Institute. Glover was promoted works manager of a new factory at Washington, and built there the first Glover tower. Later he set up himself as the Carville Chemical Co., Wallsend.

Pattison, founder with Robert Stirling Newall of Washington Chemical Co., gained many Scientific honours, including the F.R.S. in 1852.

Allhusens later merged with other companies to form I.C.I.

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A book no member should be without

Antiques of the Pharmacy. Leslie G. Matthews. G. Bell & Sons, Ltd., York House, Portugal Street, London, W.C.2. 9¼ x 6 in. Pp. xiv + 120. £3.50.

ALTHOUGH pharmacists in Britain have had a different development from that of their opposite numbers in most other European countries, they have taken the same type of pride, if from a later date, in their premises, utensils and equipment In the 17th century they were commissioning decorated mortars from bell foundries and distillation vessels from the glassmakers. They took delight in storing their drugs in delftware vessels made in potteries in London and elsewhere, and their shop drawers were embellished beyond the mere needs of identifying contents.

In recent years, as medicaments came more and more to be prepared by manufacturing chemists, economic pressures on space within the pharmacy have increasingly forced out of use those decorative furnishings.

Too many, alas, have been thrown upon the scrap heap, but many have survived because of the interest shown in them by collectors. Although that attention has been operating for a considerable period, only now has a comprehensive guide to them appeared. It is this handsomely produced and illustrated book written by the ex-president of our Society.

While the articles and equipment dealt with in its separate chapters on pottery, metals, glass, wood, medicine chests and cabinets, proprietary medicines and advertisements and printed matter relate to pharmacy as practised in Britain, comparable material from the United States and elsewhere has been included, and the 89 illustrations on art paper are superbly reproduced.

The result is a volume every member should acquire.

Among many other acknowledgements to those who have offered material or allowed him to illustrate objects in their possession, the author expresses special gratitude to the Society's secretary, Dr. J.K. Crellin, of the Wellcome Institute for the History of Medicine, "for stimulating suggestions for improving the text".

PUBLICATIONS RECEIVED

The Apothecaries in the Great Plague of London 1665 **(the 1965 Sydenham Lecture of the Faculty of the History of Medicine and Pharmacy of the Worshipful Society of Apothecaries of London). T.D. Whittet, Hon. D.Sc. (Bath), B.Sc., Ph.D. (Lond.), F.P.S., F.R.I.C., D.B.A. 8¼ x 5½ in. Pp. 52.**

Conference History Session

Subjects and speakers proposed at the History of Pharmacy session of the British Pharmaceutical Conference in Glasgow are:- "The Influence of Glasgow on World Medicine" by A.T. Sandison, MD FRC Path senior lecturer in pathology, Western Infirmary, Glasgow and member of Council of the Scottish Society for the History of Medicine, and "18th century Apothecaries in Scotland" by C.G. Drummond, FPS.

Apothecaries' apprentices in Wiltshire and Surrey in the eighteenth century

LESLIE G. MATTHEWS

I. WILTSHIRE APPRENTICES AND THEIR MASTERS, 1710 - 1760.

IN 1961 The Wiltshire Archaeological and Natural History Society published as Vol. XVIII of its Records "Wiltshire Apprentices and their Masters 1710 to 1760", edited by Christabel Dale, with an introduction by N.J. Williams. The editor had abstracted from the series of Apprentices, Registers in the Public Record Office, where they were deposited by the Board of Inland Revenue, details of Wiltshire apprenticeships for the period named. Duties had to be paid on apprenticeship indentures under an Act of 1709 (8 Anne c.5. s.40) which, though intended to be a temporary tax, nevertheless continued in force for a century until its repeal in 1804. The tax was imposed as a means of raising money to help to pay for the continuing war with France and, like many early 18th century taxes, was of an experimental nature.

The rate of tax was 6d. in the pound on premiums of £50 and under, and on larger sums 1s. in the pound. If the apprentice master failed to pay the duty, the parent or guardian of the apprentice was obliged to pay it, to avoid possible prosecution. All such indentures were sent to London to be taxed and then returned to the parents or master. Most of the apprentice indentures followed a common form, which had remained constant for more than a century. Some, as the editor records, were specially drawn articles or indentures; the majority of the Wiltshire records were common form indenture and counterpart and the apprenticeship was usually for a term of seven years. The published records are indexed under Masters, Occupations and Descriptions, and Places.

Not only can the number of apothecaries' apprentices be compared for the fifty years, 1710 to 1760, but the names of the masters and their places of business are shown. In this fifty-year period the number of apothecary apprentices registered in Wiltshire totalled 54, an

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average of 11 a year, though for the first two decades, 1710–20 and 1720–30, there were 22 in each year and ten only in the other thirty years.

The usual fee paid to the master was £50, though there are variations from £30 to £80, according to the demand of the apothecary who received the apprentice and perhaps according to his standing and reputation. Several of the Wiltshire lads were apprenticed to apothecaries outside the country. During this period of fifty years 25 boys were apprenticed to surgeons, some of whom had probably practised as apothecaries previously. It may have been because surgeon-apothecaries were becoming more widely known and that to be a surgeon was thought by parents to be likely to yield their sons a better livelihood. Certainly the number of boys apprenticed to apothecaries fell off in the period 1730–60 while the number of apprentices to surgeons greatly increased.

The records are informative about the places where apothecaries were in practice: in Salisbury, for example, William Naish was in business from at least 1711 to 1728 and during that period he took five apprentices; another, Hillman, was in partnership with his father or brother in 1722 after being on his own a few years earlier. One of Naish's apprentices, Charles Hooton, May 1719, evidently set up in business as soon as his term was completed, for in October 1723 he took an apprentice himself. Altogether, judging from the list of Wiltshire apprentices alone, there were probably a dozen apothecaries in Salisbury from about 1710 to 1730, and that number does not include those who did not take apprentices from Wiltshire but who may have had boys sent to them from other counties.

An interesting point arises regarding Thomas Tatum and Harry Tatum, apothecaries, father and son, of Mere, Somerset, who took two Wiltshire apprentices in March 1753. In the same year they are described as Thomas Tatum & Co., surgeons in Salisbury, when they took another apprentice at a fee of £140. In 1754, a year later, Thomas Tatum & Nathaniel Still, druggists of Salisbury, took another apprentice at a fee of £140. Evidently the firm was widely known and, unless the records mis-state the facts, carried on the business of apothecaries and druggists in both Salisbury and Mere and also practised as surgeons. In one case where the apprenticeship was to a woman one suspects she was a widow carrying on business after the death of her husband. In another case the apprentice is indentured to both husband and wife.

Three apothecaries put their sons to other business – one to a soapmaker, one to a currier and one to a 'gentleman'. (Apprenticeship to 'a gentleman' was not unusual during this period: 47 such are recorded. The daughter of one apothecary, after his decease, was apprenticed to the wife of a brazier in Salisbury for two years, £12 being paid as the fee. Whereas apothecaries usually demanded a fee of £30 to £80 for the term of 6 or 7 years (though one asked only £1), surgeons insisted on higher fees; one, Edward Goldwyre of Salisbury, received 200 guineas. Two barber-surgeons took apprentices: in one instance both the barber-surgeon and his wife are named as 'masters'. One apprenticeship noted is of special pharmaceutical interest – that of Paul Townsend, a Wiltshire boy who was bound to James Ward of Bristol in 1716. Ward is described as a "galley pot maker'. His name occurs in the list of Bristol potters. No apprenticeships to chemists and druggists are mentioned during this period. Many questions arise. How many of these apothecaries' businesses survived into the next half-century? Who were their successors? Were they druggists or chemists and druggists, as was the case in most towns in the late 18th century, or did the successors continue as apothecaries, keeping open shop? Alternatively did they turn to the practice of medicine? These questions can be answered only by examining local records on the spot if one is to build up the history of the practice of pharmacy in a region.

II. SURREY APPRENTICES, 1711 - 1731.

The study of Surrey Apprenticeships, edited by Sir Hilary Jenkinson (Surrey Record Society, 1929, vol.X), gives similar information to that relating to Wiltshire. Some 38 apothecary apprentices are noted during the years 1711 - 31.

This was considerably less than the number of apprentices to barber-surgeons (90), but exceeded those to surgeons (22), during the same period.

Of those apprenticed to apothecaries 15 were bound to London apothecaries, most likely freemen of the Society of Apothecaries, as they are recorded as 'citizens and apothecaries'. Of the 38 listed, 19 were to serve 8 years, their indenture forms being standard. The highest fee was £100. Usually the fee was from £30 to £50. Three masters took three apprentices each - George Isaac of the parish of St. Mary Madgalene in Southwark, John Hyett of Ebbisham, and Charles Clarke of Farnham. In 1712 William Turvin, son of a Rotherhithe glazier, was apprenticed to Joseph Miller, an apothecary and a botanist, keenly interested in the Chelsea Physic Garden, and who became Master of the Society of Apothecaries of London in 1742.

These records of Wiltshire and Surrey can be matched from the same sources in the Public Record Office, London, for other counties. They would provide excellent starting-off points for local pharmaceutical historians where other records may not be available; alternatively, they would show when certain apothecaries in an area were in business and perhaps who were their successors.

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HISTORY SESSION AT THE GLASGOW CONFERENCE

TUESDAY afternoon's history session at the History of Pharmacy session at the British Pharmaceutical Conference, Glasgow, September 1971, was organised by our Society, and the president (Dr. M.P. Earles) was in the chair. In opening the meeting he recalled Glasgow had been the location of one of the earliest attempts in Britain to protect the public against the indiscriminate sale of poisons. The Charter of the Faculty of Physicians and Surgeons, issued under the seal of James VI (James I of England) in 1599 has stipulated that none should sell 'retoun poison, asenik, or sublemate...excep onlie the apothecaries quha sall be bund to tak cautioun of the byaris, for coist, skaith and damage".

Further information on the Faculty was given by Dr.A.T.Sandison (senior lecturer in pathology, University of Glasgow) in the first of the two papers presented, its title "The Influence of Glasgow on World Medicine".

The second paper was given by Mr. C.G. Drummond, F.P.S., a Council member, now vice-president of the Scottish Society for the History of Medicine and a distinguished member of the B.S.H.P.

Shortened versions of both papers are here given.

Glasgow and World Medicine

A.T.SANDISON

THROUGHOUT the 16th and 17th centuries Glasgow remained only the eleventh largest Scottish town. Not until the early 19th century did the commencing Industrial Revolution lead to a rapid increase in its size, so that it became eventually the second city of the British Empire. It remained so until after the Second World War, when it was overtaken by Birmingham.

The University of Glasgow, founded by Papal bull in 1451, for a long time played no active part in medical teaching. The Medical School of the University did not become really active, in fact, until the 19th century.

Glasgows' Royal Infirmary was opened in the High Street, near the Old College, in 1794, its architects the famous Adams brothers. There were 136 beds. The staff comprised a house-surgeon who was also apothecary, two physicians, four surgeons and one clerk, and the population the hospital served numbered about 66,000. New blocks were added from time to time. In 1861 there were 572 beds, today there are nearly 900.

Until 1870 the Royal Infirmary remained the main teaching centre. In that year the University chairs were transferred to the Western Infirmary, built alongside the new University campus area at Gilmorehill. Today both the Royal and the Western Infirmaries are major teaching hospitals of the Medical School of the University; the school has the largest annual intake of medical students in the United Kingdom.

The Faculty of Physicians and Surgeons of Glasgow (later the Royal Faculty and now the Royal College of Physicians and Surgeons of Glasgow) was founded in 1599, under the Privy Seal of King James VI (James I of England and Wales) by letter to Maister Peter Lowe, Robert Hamilton and William Spang (apothecar). Lowe, a Scot, had served as an army surgeon on the European continent and was a graduate of Paris. He was the author of *Spanish Sickness* and of *Chyrurgerie* in (1597), the first book on the art of surgery published in the English language. Lowe died in 1612.

The practice of medicine, surgery and pharmacy in the West of Scotland was regulated by the Faculty. One of its members, Robert Houston, is believed to have performed, in the early 18th century, the first successful

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ovariotomy, antedating by more than 100 years the more celebrated ovariotomy by Ephraim McDowell of Kentucky. William Smellie, born in Lanark and a fellow of the Faculty in the early 18th century became one of the most celebrated obstetricians of all time. His book on midwifery, published in 1752, had a great and continuing influence.

William Cullen, a Hamilton man who began to lecture on medicine in the University of Glasgow in 1746, with his pupil, Joseph Black, really founded the Glasgow school of medicine. Cullen became Professor in 1751, but was soon called to the chair of chemistry in Edinburgh. Black, who was his successor in Glasgow, also succeeded him in Edinburgh when Cullen was translated from the chair of chemistry to that of medicine. Cullen founded the University Chemistry Laboratory in Glasgow in 1747, was the first scientific chemist in Britain. Black was the first to isolate carbon dioxide.

William Hunter, who studied arts at Glasgow and was later apprenticed to Cullen in Hamilton, soon moved to London, where he attained wealth and fame as a physician, obstetrician and anatomist. On his death Hunter bequeathed his celebrated Museum to the University of Glasgow. His younger brother John eventually became the greatest anatomist in Europe and one of the great surgical pathologists and experimental surgeons of all time. He was buried in Westminster Abbey.

At Glasgow University there were founded in 1815 chairs of midwifery and surgery, in 1817-18 chairs of chemistry and botany, in 1831 of materia media and in 1839 of physiology and forensic medicine. Among the professors of materia medica was John Easton (of Easton's syrup fame) while the chair of forensic medicine was held with distinction from 1898 till 1962 by the Glaisters, father and son. In the early 19th century, Jeffray (professor of anatomy) and Burns (professor of surgery) were largely instrumental in effecting the Anatomy Act of 1832, which ended the activities of the resurrectionists or "sack-'em-up" men. A later anatomist – Allan Thomson – attracted many students to the Glasgow school. Sir William Tenant Gairdner, a physician of international repute, was the first to describe bronchiectasis and amyloid disease of the kidney.

William Mackenzie, who founded the Glasgow Eye Infirmary in 1824, was the most distinguished ophthalmic surgeon of his time; his works were translated into German, French and Italian.

The *Glasgow Medical Journal,* founded in 1828, became merged in 1956 with the *Edinburgh Medical Journal* to become the *Scottish Medical Journal.* To the Medico-Chirurgical Society of Glasgow, founded in 1860, Joseph Lister delivered in 1868 his first public account of his antiseptic method.

Lister had come to the chair of surgery in Glasgow in 1860 from Edinburgh, and his major work on the antiseptic method was carried out at the Royal Infirmary. Unfortunately, if not disgracefully, the wards in which he revolutionised the practice of surgery were demolished in 1924 when the Royal Infirmary was rebuilt; after the demolition many of the bricks from Lister's wards were taken away as souvenirs to all parts of the world. The present Lister lecture theatre stands on the site of those wards. Many Lister relics are housed at the Royal Infirmary, College of Physicians and Surgeons and Hunterian Museum.

An important part in the Lister story was played by Thomas Anderson (professor of chemistry at Glasgow) who drew to Lister's attention the work of Louis Pasteur in France.

The record of Sir William Macewen (1848 - 1924), a pupil of Lister in the field of intracranial surgery, has never been equalled. In 24 operations for brain abscess he had 23 recoveries.

Macewen's book *Pyogenic Diseases of the Brain and Spinal Cord,* published in Glasgow in 1893, is a classic. Macewen was also the first surgeon successfully to remove a lung (in 1895). He performed pneumonectomy in 4 cases of pulmonary tuberculosis, and was also a pioneer of bone grafting.

The pioneer work of Sir George Beatson on oophorectomy as a palliative in advanced breast cancer was largely forgotten till the 6th decade of the present century, when it became the basis of endocrine palliation of mammary cancer.

Sir William Leishman (1865-1926), a pioneer in malaria and in inoculation against the enteric fevers, is commemorated in the Leishman a group of organisms, which cause kala-azar and cutaneous leishmaniasis, and also in a stain that is used the world over in preparing blood films. Another Glasgow man, Sir Gilbert Blane (1749-1834) is widely recognised as the father of the Naval Medical Services.

The initiative of John McIntyre, soon after the discovery of x-rays by Rontgen in 1896, led to the formation of an x-ray department at the Royal Infirmary, the first of its kind in the world. Other claims to priority made by the Royal Infirmary are that it started the first ambulance service and founded modern nursing under Mrs. Rebecca Strong, a pupil of Florence Nightingale.

In pathology Glasgow has an honoured place. Joseph Coats, first professor (1893) published a text book that was for some time a standard work. Coats was followed by Sir Robert Muir, whose *Textbook of Pathology* now in its 9th edition has since 1924 been widely used both in British medical schools and in the Commonwealth.

Thus men trained or working in Glasgow have influenced the course of world medicine.

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Adam Drummond of Megginch Surgeon-Apothecary

C.G.DRUMMOND

IT would be difficult to traverse daily for 30–40 yrs, as I did, the historic stones of the heart of Old Edinburgh, represented in its Lawnmarket and Grassmarket, and remain oblivious of its atmosphere and unaffected by its past. I had the added allure of being associated with two pharmacies there, that in the Grassmarket dating from 1797 and the other, of the Lawnmarket from 1700. It is with the latter I propose to deal today, through the person of its most illustrious incumbent, Adam Drummond of Megginch.

I count myself fortunate indeed to have become ensnared by the discovery of important documentary evidence of the life of the pharmacist more than two hundred years ago.

In 1952, reconstruction of Fisher's Land in the Lawmarket revealed a number of prescriptions that had lain undisturbed for over a couple of centuries. In examining those faded documents I was, at the time, primarily concerned with the drugs in use in those days; with the physicians who had prescribed them and with the patients who had been undergoing treatment. The fact that several of the prescriptions bore the direction "To Mr. Drummond's shop" was not, at the time, material, but it became clear that the Mr. Drummond referred to was Adam Drummond, Surgeon-apothecary, Burgess of Edinburgh.

In Scotland, pharmacy and surgery were intimately bound up. The subjects were taught together as part of a course. First of the surgeon-apothecaries were James Borthwick and Thomas Kincaid, 1657. The Incorporation of Surgeons was erected into a Royal College in 1778 and a separate body of druggist-apothecaries arose seven years later, but as late as 1833, only eight years before the founding of the Pharmaceutical Society, 43 out of a total of 70 chemists, druggists and apothecaries in Edinburgh were still practising surgery and included the prefix "surgeon" in their description. One, John Cochrane, of the Lawnmarket pharmacy, was described as surgeon and accouchur. He continued to practice pharmacy until 1880, by which time, I fancy, scalpel and forceps had been put aside. With such differing origins, the merging of interests of Scotland and England into a Pharmaceutical Society of Great Britain is seen to have been no mean achievement.

Having established that the Mr. Drummond of the Lawnmarket was Adam Drummond of Megginch, Perthshire, I was disposed to let matters rest, but the family name kept intruding itself. In a little country churchyard in Pencaitland, East Lothian, far removed from Perthshire, I came across a stone to the memory of one Alison Drummond of Megginch.

Then, only a few months ago, in a legal office in the New Edinburgh, which was only a vision in the time of Adam Drummond, a document was discovered which provided the necessary impetus to sustained effort: an Indenture of apprenticeship between Adam and a youth called John Campbell. The deed is in a perfect state of preservation and its discovery has proved of the most vital importance.

Adam Drummond was the third son and fifth child of Adam Drummond, the 2nd of Megginch. His father, born in 1641, was a lawyer, a Privy Councillor of Scotland and, for many years, a Member of the Scottish Parliament.

"Our" Adam was born in 1679 on the family estate at Megginch Castle and went to the local school at the village of Errol. He entered St. Andrews University at the age of 16, and three years later joined an older brother in Edinburgh, becoming apprenticed to a surgeon, Thomas Edgar. In the winter of 1699 Edgar was continually ill, and the young apprentice overworked. He suffered in his health and had trouble with his eyes.

But the cold of Edinburgh winters, and the disturbed nights, did not discourage Adam who, on the completion of his training, set out for Leyden to join his brother John.

Adam broke his journey in London to take a course of anatomy under a Dr. Erskine. He had wanted to study in Paris, but was opposed by his father.

On his return to Edinburgh, Adam was elected to the Incorporation of Surgeons on 6 Nov., 1707, setting up business as a surgeon-apothecary in Fisher's Land in the Lawnmarket. (A "land" was a tall tenement).

In 1708, Adam Drummond was conjoined with Robert Elliott in the post of Professor of Anatomy, and appears to have made considerable impact within a short time, for in 1707 he was made librarian of the Incorporation of Surgeons.

On Elliot's death in 1716 Drummond was joined by McGill, but on January 21, 1720, they stated to a meeting of surgeons that they were unable to attend to their professorship "owing to the state of their health and business'.

Adam lived for nearly forty years thereafter, but there can be little doubt that his business was absorbing more of his time.

Documentary evidence of the regard in which Drummond was held as a pharmacist is preserved in the old

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prescriptions uncovered in Fisher's Land in 1952, for they were in the handwriting of the most eminent physicians of the day. He enjoyed the complete confidence of his medical colleagues.

The most recent document to come into my hands is the Indenture between Adam Drummond and an apprentice, John Campbell. It suggests that, while certain to have a fine training, the said John Campbell seemed destined to have a pretty thin time in other ways.

The indenture reads: "The indentures made at Edinburgh the twentieth day of February – One thousand seven hundred and thirty-six years. In themselves proport leall and soothfast witnessing That it is appointed, agreed and finally ended betwixt Adam Drummond, Chirurgeon Apothecary, Burgess of Edinburgh on the one part, and John Campbell, lawfull son to Collin Campbell, Collector of the Customs at Prestonpans; with the special advice and consent of the said Collin Campbell as Cautioner and Surety for and with him for fulfilling of his part of the Indentures underwritten. And also the said Collin Campbell for himself and taking burden in and upon him for the said John Campbell. "The said John Campbell" became "bound Apprentice and Servant to the said Adam Drummond in his Arts and Calling of Surgery and Pharmacy for all the days space years and terms of Five years next and immediately following his Entry thereto, which shall be and begin, God willing, at the day and date hereof; During the which space the said John Campbell Binds and Obliges him to serve the said Adam Drummond and his said Master faithfully and honestly by day and night, Holy day and work day in all things godly and honest; and shall not hear of his Master's skaith at any time by day or by night during the space foresaid but shall reveal the same to him and hinder it to his power; and that he shall not Reveal his Master's Secrets in his Arts, nor the secret diseases of his patients to any person whatsoever; nor shall be absent himself from his said Master's Service at any time during the space foresaid without his Master's Special Licence had and obtained of him for that effect; And that he shall not commit (as God forbid) the filthy crimes of Fornication or Adultery, nor play at any games whatsoever, And that he shall not be Drunk, nor a Night Walker, Nor a Haunter of debauched or Idle Company; and that he shall not disobey his Master's Orders, pretending he is Elder or Younger apprentice, or upon any other pretence whatsoever; And that he keeps his ordinary Dyetts and Bed and Board unless he be withdrawn in his Master's necessary affairs and Employment, and no other ways; And shall not go to any of the Professors of Medicine, Chymie, Anatomy, Surgery or Materia Medica during the first three years of their Indentures; and the last two years thereof only with his said Master's Consent..." There were other requirements such as that the apprentice must not "misbehave by word or deed or any other manner of way". An Act of the Edinburgh Town Council March 31, 1693, absolved the masters from the actions of their servants, and later it is extremely unlikely that Adam Drummond and his young apprentice were unaware of that purposeful band which, in the riots of February 20, 1736, bore Captain John Porteous to his doom, for the procession passed their very door on its way to discharge lynch law in the Grassmarket.

John Campbell proved himself to be a worthy apprentice, and the deed bears his discharge in his master's handwriting.

"I, Adam Drummond, Surgeon in Edinburgh doe acknowledge that John Campbell within designated has served me honestly and faithfully during the time of his Indenture. I therefore discharge him of all obligations prestable by him. In witness whereof I have written and subscribed this all for the fifteenth day of March one thousand and seven hundred and forty and two years".

John Campbell appeared in the Burgess Roll of Edinburgh on 21st. July, 1743, as a burgess and guildbrother. He was elected to the Incorporation of Surgeons on October 7 of the same year and followed in his master's footsteps by being appointed Librarian of the Surgeons from 1746 to 1748. Most of the 18th Century prescriptions found in Fisher's Land bear dates which indicate that they were dispensed in the years in which young John Campbell was undergoing his training. It seems certain that he had a hand in their compounding, just as it is certain that he visited the Physic Garden to collect some of the ingredients for the Galenicals required.

There is evidence, from the family archives and from the autobiography of Alexander ("Jupiter") Carlyle, D.D., of Inveresk, that Adam Drummond was still engaged in the training of apprentices in 1745 at the age of 66, though the information is incidental and concerned more with the ill-starred venture of Prince Charles Edward to restore the throne to his father.

Particular interest attaches to a letter sent in the afternoon of the day of the battle of Prestonpans by Adam to his brother's wife at Megginch. It reads, "Lady Megginch. J. Cope's army is quite routed, your sons Adam and Francis are made prisoners, along with Colonel Hackett. There is none of them wounded. They are lying in Colonel Gardner's house near the field by Prestonpans".

On the purchase of a house and estate near Burntisland, in Fife, Adam Drummond became known as "of Binand". I have used the title "of Megginch", and it is right to identify him in that manner for there are, I am glad to say, still Drummonds of Megginch. I cannot

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sufficiently express my indebtedness to the wife of Captain Humphrey Drummond for her painstaking care in assisting me with my inquiries. Suffice it to say that, just as Robert Elliot and Adam Drummond were "conjoined" in the professorship over 250 years ago, so should that lady be "conjoined" in the authorship of this paper.

Adam Drummond, Chairman of the Surgeons 1746-48, died at the close of 1758 and lies in Greyfriars Churchyard within a hundred yards of his illustrious predecessor, James Borthwick – two surgeon-apothecaries of distinction who adorned their profession and left their mark for all time.

Pharmacist -cum-printer

That a busy and successful pharmacist should be also a prolific printer and publisher would seem to provide fascinating material for a talk at a history-of-pharmacy conferences, and so it proved.

The full title of Professor P. Isaac's illustrated talk at Newcastle on Saturday April 17 was "William Davison of Alnwick, Pharmacist and Printer", but not surprisingly the printing aspect provided most of the slides.

William Davison, said the speaker, was born on November 16, 1781. After leaving school he was apprenticed in Newcastle to a Mr. Hind, chemist. He "arrived" back in Alnwick in 1802 to set up business as a pharmacist.

He was active and successful, selling "patent" medicines and printed matter over the whole of Northumberland and Durham. "The chemistry department in Mr. Davison's establishment", writes Hindley, "was noted in the North of England. As a school for the study of medicine it was remarkable for the many eminent men that emanated from it; and it is pleasing to look back upon the names of not a few who in after life became distinguished in the various walks of science".

An association between the selling of "patent" medicines and of stationery was at that time frequent, but it was much less common for a chemist to be a printer.

Davison's interest in printing must have begun quite early because for a few months in 1803 he was in partnership with Joseph Perry, a local printer. The important partnership came later, in 1807, when he entered into partnership with John Catnach, a native of Burntisland and 12 years his senior. From that year until his death in 1858 he was an active printer, stationer and publisher.

Catnach, who had set up his press in Alnwick in 1790, had some pretensions to fine printing, but was either a poor businessman or too fond of the bottle. For only a few months did he remain in partnership with Davison. He moved to Newcastle, and soon became bankrupt.

Davison, on the other hand, came into printing at an opportune moment. The beginning of the nineteenth century saw a great rise in the demand for popular printing, and chapbooks and garlands enjoyed a vogue in Scotland and northern England from about 1770 to 1830.

Davison's enterprise was evidenced by the diversity of his productions: children's books, chapbooks, schoolbooks, billheads, commercial printing, a newspaper (still in existence), prints and guidebooks, cast-metal ornaments, wood-letter, etc. "The whole adds up to a very considerable achievement for a most active pharmacist and apothecary".

Quite early in his printing career Davison adopted stereotyping, by no means then a general technique. He employed the famous wood engraver, Thomas Bewick, to illustrate his publications, and used the cuts thus obtained to embellish not only the best and choicest, but scores of his least important and cheapest books. He

Davison's trade card (University Library Newcastle-upon-Tyne)

rarely employed Bewick's original blocks, but stereotypes of them, and it seems clear that he stereotyped for other publishers and booksellers. In all, he made his contribution to the printing expansion of the North-east. He gave a good deal of support to local authors, and he was concerned to record the history of his own town.

Quite remarkable for a country printer are his splendid octavo Book of Common Prayer (1817) and folio Universal Holy Bible or Complete Library of Divine Knowledge. The Bible is illustrated with 49 engraved plates and was issued in 100 weekly parts at 1s. each.

The stamp duty on newspapers was repealed on June 15, 1855, but a year earlier, on June 1, 1854, Davison had already published the first number of the *Alnwick Mercury, Northumberland Advertiser and Entertaining Miscellany*. The paper was printed part in London and

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part, with local news and advertisements, in Alnwick. The whole edition (1000) of the first issue was sold, and by the time of Davison's death the monthly printing was over 2,600.

At Davison's death the businesses passed to his son, Dr. William Davison, who kept the paper going for a year before selling it to Henry Hunter Blair. In 1884 it amalgamated with the *Alnwick County Gazette,* and today is published as the *Northumberland Gazette.*

Though busy as pharmacist and printer, Davison found time to be a churchwarden, and was among those responsible for the erection of a workhouse in 1810. Towards the end of 1815 he was a regular subscriber to the Alnwick Dispensary, and in November 1836 was standing for election as a Guardian.

"I have a picture", concluded Professor Isaac, "of a vigorous, able and forthright provincial tradesman".

Medals for British Rhubarb

J. BURNBY, B. PHARM, M.I.S.

IN the eighteenth century there developed in Europe what has been termed the "rhubarb mania", for at that time nearly every country was trying to grow this sovereign cure for all ills.

Chinese in origin, the drug was known in Europe at least by the time of Dioscorides (around 50 A.D.), though its exact source was unknown to him. All he knew was that it came from beyond the Bosphorus. By the fourth century A.D. it was established that the drug came from the east of the river Rha (the Volga of today).

In the 12th century trading caravans from the northern and western provinces of China were bringing it as far as Bokhara in Central Asia, and from there it reached Europe either by way of the Black Sea or by the Indus river and the ancient port of Barbarike, one of the numerous branches of the famous "silk road". The first and almost the only West European to visit the rhubarb-yielding parts of China was Marco Polo.

Not surprisingly rhubarb was in those days a costly drug in Europe. In France in 1542 it fetched ten times the price of cinnamon and four times the price of saffron. In 1657 the official list of drug prices quoted opium at 6s. per lb., scammony at 12s. per lb. and rhubarb at 16s. per lb.

Great efforts were made to grow in the West a drug regarded as so essential to the apothecary's drug cupboard, but efforts were much hampered by the fact that no competent observer had been an eye witness to the particular species of rhubarb that produces the commercial drug. As a result, many rhubarb seeds and plants were brought into England that were hopefully proclaimed to be those of the true rhubarb but which, after they had been cherished and lovingly raised to maturity, proved not to be.

In England the Royal Society of Arts spared no pains to promote the introduction of new medicinal plants and in 1763 appointed a committee "to pursue the requisite measures for introducing the culture of true rhubarb".

Specimens of plants and seeds were obtained from various sources, but the committee remained doubtful whether the genuine article had been obtained until, through the agency of Alexander Dick, the then president of the Royal College of Physicians of Edinburgh, whose brother-in-law was the British resident at the court of the Tsar, a Dr. Mounsey, the Tsar's chief physician, was persuaded, with the connivance of the Tsar, to get a box of seeds of the "true" rhubarb smuggled out of China through the Russian medical service in Asia.

Seeds from St. Petersburg

The seeds thus obtained were successfully grown in the Royal Botanic Gardens at St. Petersburg and when, in 1762, Mounsey retired and settled in Edinburgh, he brought with him a box of seeds, which were distributed for experiments to members of the Royal College and to influential landowners in Scotland and England. Among the recipients was a Mr. James Inglish (or English), who in 1769, when some of his plants were more or less mature, sent particulars and plants to the R.S.A., plus a supply of seeds for distribution among members. For his work Inglish was granted a gold medal.

Having found an attested source the Society offered from 1770 an annual gold medal for raising the greatest number of plants, not less than 100, of the true rhubarb species, *Rheum palmatum.* The first of them was awarded in 1776 to Sir Alexander Dick for his initiative, and during the next 25 years nearly twenty awards were made, mostly of gold medals.

In 1793 the recipient was Thomas Jones, Fish Street Hill, London, chemist. In February of that year Jones sent in to the R.S.A. a certificate, signed by Rev. William Shaw, of Four-tree Hill, Enfield, testifying that "Joel Rowsell, of the parish of Endfield, gardener, had planted for Thomas Jones of Fish Street Hill, London, 420 plants of *Rheum palmatum* or true rhubarb at 6 foot distance from each other, in a piece of ground rented of me by the said Mr. Jones, situated at Four Tree Hill, and that there is every prospect of their succeeding".

In the accompanying letter Jones wrote that for

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several years he had entertained the idea that rhubarb might be cultivated in this island, and then the idea was confirmed by his being put in possession of a root, the produce of a garden in Enfield. (The garden was that of John Sherwen, who was a medical practitioner practising in Enfield from 1771 to 1805.)

That root, Jones reported, was much decayed, probably due to excess damp, but like the curate's egg was excellent in parts, indeed equal to any Russian rhubarb he had ever seen. That had encouraged him to continue and given him the determination to become a planter, as he put it.

From his experiments Jones concluded that "the time for sowing was March or April or August and September, and that those plants raised in the spring should be transplanted in the autumn and vice versa; that they cannot have too much room and that room and time are essentially necessary to their being large, of a good appearance and, as I imagine, the increase of their purgative qualities; that, to effect these properties, the soil must be light, loamy and rich, but not too much so lest the roots should be too fibrous. That their situation can scarcely be too dry, as more evils are to be expected from a superabundance of moisture than any actual want of it; and lastly we may conclude that in particular the injuries which they are subject to are principally during their infancy and to be imputed to insects and inattention to the planting season; afterwards from too great an exposure to frost but none can be dreaded from heat".

Jones gained another gold medal in 1797 for having grown 935 plants, at 4 ft. distance from one another. The following year he added 3,040 plants, making 5,000 in all. This time he was offered by the Royal Society of Arts either another gold medal or thirty guineas. He took the monetary award.

Sir William Fordyce, a prominent member of the Society, said that the rhubarb market at that time was worth £200,000 sterling. By 1800 Jones had planted over 4,000 more plants and rhubarb of English growth was in use at Guy's, St. Thomas's and Bart's hospitals in London and at several others.

Opium too

It would seem that the problem of true Shensi rhubarb had been solved, and in 1797 the R.S.A. began, as a result of an approach by John Ball, to take an interest in opium. Ball, a surgeon of Williton in Somerset, had already won three awards for the growing of rhubarb, and now forwarded a pot of opium produced from poppies grown in his garden, and mentioned in his letter that he expected a pecuniary reward. The Society was willing to come to terms, and offered him 50 guiness in return for a detailed account of how he obtained the drug. They went on to offer a similar amount or a gold medal for the production of opium on a substantial scale, at least 20lb. of the drug being required.

In 1800 Thomas Jones successfully claimed £50 from the Society for producing that minimum quantity of opium. He wrote that he had first grown a quantity of white poppies *(Papaver somniferum)* in the summer of 1794, but that he had had limited time owing to his work on rhubarb growing. In March 1789, he had sown 5 acres of ground in the parish of Enfield with opium poppy and had procured 21 lb. of opium. He had found wind and rain bad for growth, and that poppies particularly liked a sandy loam.

He had invented a number of scarificators, but in the end used only two of them, and it did not seem to matter whether the incisions of the capsule were made vertically or horizontally.

The opium had been collected between July 6 and the second week in September. He had employed seven or eight boys, of eight to 12 years of age, together with a man superintendent. The youngest children received threepence a day, and if "tractable and well disposed", an extra penny for each year of their age. He had tried to excite a spirit of emulation among the boys, "even writing the name of each boy on his cup", but had been only partially successful. He had discovered that early morning was the most valuable time for collecting the latex, and those who came by 5 o'clock in the morning received an extra penny. At first, even with that special inducement, few were attracted. Then others were shamed into coming.

To reduce the exudate to its proper consistency it was spread thinly on shallow dishes and exposed under the glass to the sun. The heat of a fire he found far too fierce, causing great deterioration to the opium.

The drug was pronounced as good as that from Turkey. George Pearson, a well known physician at St. George's Hospital, had made some trials with it and said that the results were as good as those from the best foreign opium, whilst G.E. Lawrence, the apothecary at the Middlesex Hospital, found it gave the same relief as the imported variety.

So, though Jones had proved the commercial possibility of growing opium in this country, he had found more problems than Ball had reported, and in some years had suffered considerable losses due to bad weather.

BIBLIOGRAPHY

Robinson, W. (1823). *History of Enfield*

Hudson and Luckhurst. *The Royal Society of Arts (1754–1954).*

Wood, Sir H.T. (1913). *The History of the Royal Society of Arts Transactions of the Royal Society of Arts.*

Stephenson and Churchill (1834). *Medical Botany.*

Fluckiger and Hanbury (1879). *Pharmacographia.*

http://dx.doi.org/10.24355/dbbs.084-201801041547

Early Observations on Curare

THE properties of the arrow poison curare first became known to Europeans through the unhappy experience of some of the Conquistadors during their ventures into the South American continent. Many dramatic, even blood-curdling, stories were told about its effects.

One writer, Friederici, expressed the view, which is quite tenable, that the conquest of the Americas would have been delayed for at least a hundred years if Columbus had made his first contact, not with the harmless inhabitants of San Salvador, but with the Amazonian Indians and their poison arrows. Those weapons were viewed by the Spaniards with a respect that led them to put on cotton-wool padded garments that must have been torture to wear during marches in the tropical heat.

A sober and objective account of curare and its properties appeared in the published works of the German scientific explorer Alexander von Humboldt after his travels with the Frenchman Aime Bonpland in Venezuela, Colombia, Equador and Peru after their landing at Cumana in July 1799. For long Humboldt's appraisal was considered by many to have been the first to be written, but in 1961 Renee Gicklhorn, in *Zur Geschichte der Pharmazie,* challenged that priority.

Forty years before Humboldt's treatise, he pointed out, a book by a Jesuit priest, Franz Xavier Veigl, dealing with the territory of the Maynas in the Upper Maranon region up to 1768, had described the poison with a high degree of detail and accuracy. "His writing is almost as exact and objective as the later writings of von Humboldt". The following is an example.

> Strangest of all is the poison which they were able to prepare more excellently than any others and which was eagerly bought up from them everywhere. In the whole Jesuit province of Maynas this or similar poisons are needed for hunting. It is spread on the tips of both the spears and the small arrows which are shot with a blowpipe, and if a tip poisoned in this way only enters far enough to shed one drop of blood, the game is certain to be slain. According to several experiments it (the poison) killed within a minute, when newly applied, slightly more slowly when dried on the arrows the way the Indians carry them on their quivers. An arrow painted fourteen months previously and which had therefore lost much of its strength, killed an only slightly wounded hen in seven minutes. This poison* has a strange effect on the blood, which quickly withdraws as it comes into contact with the poison, and rushes to the heart with such a force that it often bursts the thinner blood vessels of an animal shot only on the tip of its foot, so as to eject blood from its mouth and nose. Everything killed by it can be eaten safely and without fear, even if the point of the arrow were to remain on the meat and even if it came into contact with the teeth of the person eating the part where it got stuck. The Indians laugh their heads off when they notice an inexperienced European startled by this.
>
> It is made from the juice of more than thirty roots, herbs and barks with numerous details and the exactest observation of the whole recipe . . . almost like the way our chemists make the theriac. Indeed the poison is not unlike theriac in appearance, if it were not for its slighter tougher character and its odour, which although violent is still not very unpleasant. One can play around with it as much as one pleases as long as it does not come into direct contact with the blood. Even if a little of it were to get into the stomach by chance or deliberately it could not easily be harmful unless it met exposed blood inside. The easiest and safest antidote is a good spoonful of salt or sugar dissolved in a little water and drunk over and again as soon as possible after the poisonous shot was received.

The Jesuit writer wound up his account with an expression of view that man must thank God that the Indians, who possessed all that poison, used it only in hunting, but not lightly on one of their brothers. It would have been an outstanding murder weapon, yet the missionaries had had serenity enough to go alone and without protection to work among the natives, and had endured.

Franz Veigl, born in Graz, Austria, entered the Society of Jesus in 1738. He opted for missionary work overseas and was sent to the Maynas province of Amazonia. In 1768 the Order was expelled from South Americas, but the mission centre of Father Veigl had already lost most of its personnel in a smallpox outbreak. Veigl returned to Austria, where he died in 1798.

*The Spaniards call it "mortal yerba of Uraba" or "twenty-four hour yerba", thus characterising the poison's quick effect.

BIBLIOGRAPHY

Vellart, J. *Histoire du Curare.* Gallinard.

K. Bryn Thomas. *Curare.* Pitman.

Burnap & Little. *The Flying Death.* Little Brown.

PUBLICATIONS RECEIVED –

Old Pharmaceutical Books. **Catalogue (in Dutch) of books shown at an exhibition at Heerlen, Holland, April 17 to May 2, 1971, organised by the Cerde Benelux d'Histoire de la Pharmacie, Akerstraat Noord 43, Hoensbroek-Treebeck, Holland.**

Boletin de la Sociedad Espanola de Historia de la Farmacia, **September 1970 and March 1971.**

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Apothecaries of The Spicers and Kings Lynn, Norfolk

LESLIE G. MATTHEWS

DURING the late Middle Ages Kings Lynn was a thriving port. Its first Charter was granted by King John on September 14, 1204, at the request of John, Bishop of Norwich. Lynn was to have a Merchants' Guild of Holy Trinity, St. Margaret's Church and Priory. It was to be established on lines similar to those of the Guild of Oxford. The Ordinances of the Guild were set down before 1300. No one not a brother was to deal in merchandise in Lynn. Other rights were granted to burgesses and merchants. A mint was set up in Lynn in 1306-07 and it flourished until 1344-45. A Mayoralty was granted by 1216 and was well established by 1244. In 1266 Lynn was importing wine for Henry III. Early in the 15th century a patent for establishing the aldermen, stewards and brethren was granted. The penalty for not having mass celebrated for the guild on Holy Trinity Sunday in St. Margaret's was one gallon of wine.

The Guild had its own staithe for loading and unloading vessels. One of its obligations was to succour the poor brethren, poor persons, and the lepers near and about Lynn. By 1432 there were 6 leper houses in Lynn and its environs.

There are remains of many of Lynn's monastic buildings, including a pilgrims' chapel, called the Red Mount, completed in 1485. The Museum is well worth a visit. Some time after 1670 a sermon was to be preached in St. Margaret's Church every fourth year in commemoration of John Crane, late apothecary in Cambridge, a good benefactor to the poor of Lynn.

SPICERS. The earliest mentioned spicers in the *Calendar of the Freemen of Lynn* are William of Huneghton and William de St. Edmund, both of whom purchased their freedoms in 1305-06. St. Edmund's father, Adam, had been Mayor of Lynn in 1280-81. They are followed by Radulf le Spicer in 1307. He was owner of land adjoining that of Simon, son of Reginald le Sauser. Radulf's son, Ricardus le Spicer, executed a Deed of property in 1310 in which his mother, Theda le Spicer, is named. According to the will of John of Docking, 1327, a rent of 12 denarii was paid to him for this property.

Two men named Spicer, and who are likely to have been spicers, since at that period names still denoted occupation, are recorded from 1372 to 1422. Both were men of repute in the borough. William Spicer became a burgess in 1371. He acted as pledge for the good behaviour of those wanting to become freemen, he was a jurat and appointed to be a collector of the King's taxes, and in 1389 he was one of 12 persons appointed to inquire into leprosy. John Spicer, who may have been a brother of William, as both are named together as pledges for a freeman, was himself a freeman in 1384, after an apprenticeship to John Brandon. He was also a jurat and a collector of King's taxes in 1392 and 1395. He was a jurat for taxing foreigners, i.e. persons wanting to trade in Lynn who were not free of the borough, and he was Mayor from 1420 for three successive years. Other spicers who became freemen were Stephan Burgh, an apprentice of John atte Hill, a spicer, in 1430–31, John Waleys, jun., 1440, and John Benet, who purchased his freedom in 1469-70. After that year there is no record of a spicer taking up the freedom.

There seems to be no speedy transition from spicer to *grocer,* such as occured in cities like Canterbury. The few spicers noted in the *Calendar of Freemen* during the 15th century may have been carrying on a trade in a much wider variety of goods than spices and so acting as grocers. Ships were unloaded at Lynn from many Continental ports and there was much trans-shipping to East Coast ports of England. Four grocers are noted in a document listing freemen from 1440-1501, and another is recorded as a freeman in 1561-62. Three are named during 1620-24, but not until 1638 did the number begin to increase: thereafter it grew rapidly.

APOTHECARIES. See below for a complete list of those who took up the freedom of the borough from 1292-93 to 1787-88.

After the record of Robert de Burgh, apothecary in 1292-93, no further apothecary is mentioned in the Rolls until 1421-22, when John Springwell comes into the list. The *Red Register of King's Lynn,* refers to the will of one Robert Lambert, 19 January, 1322-23, in which is noted, in Latin, the gift of 'my gold necklace, fastened to my supertunic, to Helwise, the wife of Nicholas, apothecary of Beverlaco' and to Nicholas himself, 'my seal, with two silk purses' and 'my chain with my silver seal'.

APPENDIX

List of Apothecaries who became freemen.

(A=Apprenticeship; B=Freedom by Birth; G=Gratuity paid, P=Purchase.)

APOTHECARIES

1292 - 3 Robert de Burgh. P

1421 - 2 Springwell, John. P

1429 - 30 Chevale, Robert. A
1433 - 4 Lambard, Henry. A
1433 - 4 Rungeton, John. A
} Apprentices of Springwell

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c. 1480 Ley, Robert.
1506 - 7 Amfles, John. P (Father was Robert Amfles, a brewer, Mayor in 1516 - 7 and 1532 - 3).
1536 - 7 Hoker, Walter, P.
1594 - 5 Makyns, William. G (Sometimes known as Makyn)
1619 - 20 Bradford John. A (Apprentice of Makyns; Bradford's eldest son became a grocer.)
1639 - 40 Armitage, William. A (Apprentice of Bradford.)
1661 - 2 Tilson. John. A (Apprentice of Bradford.)
1633 - 4 Fraunces, Robert.B (Apprentice of Makyns)
1667 - 8 Fraunces, Robert. B (Apprentice of his father)
1688 Spencer, Lewis. A (Apprentice of Robert Fraunces, jun.)
1652 - 3 Browne, Richard, G (Eldest son of Richard Browne, also an apothecary.)
1660 -1 Hullier, Robert. A (Apprentice of Richard Browne; father was a wealthy merchant.)
1653 - 4 Bassett, William. A (Eldest son of John Bassett, Mayor 1653 - 4 and 1660 - 1.)
1654 - 5 Biddings, Edward, A (Apprentice of Robert Fennes, apothecary.)
1663 - 4 Sothouse, Robert. G (Took freedom at the Mayor's request.)
1666 - 7 Pulvertofte, John. P
1678 - 9 Wildbore, Godfrey. A
1689 - 90 Audley, John. A
1729 - 30 Harvey, John. A
} Apprentices of Pulvertofte.
1695 - 6 Greene, Charles. B (Alderman, and became Mayor 1712 - 3).
1719 - 20 Exton, John. A (Apprentice of Greene; Mayor 1735 - 6 and 1750 - 1. Exton, when Mayor, was a surgeon and apothecary.)
1740 - 1 Worman, John. A (Apprentice of Exton; recorded as 'surgeon and apothecary'.)
1708 - 9 Hoogan, Persival. A
1716 - 7 Whaites, Gooch. G
1732 - 3 Pigge, Andrew. A (Mayor 1746 - 7.)
1741 - 2 Johnson, Thomas. B (of Norwich.)
1743 - 4 Turner, William. G
1752 - 3 Taylor, Henry. B
Hammond, Thomas. B (surgeon and apothecary.)
1782 - 3 Forrest, Job. A (surgeon and apothecary; apprentice of Hammond; his son became a surgeon and was Mayor, 1822 - 3.)
1761 - 2 Edwards, Nicholas. P
Hamilton, Robert. P
1787 - 8 Crawford, Hugh. G (surgeon and apothecary.)
1796 - 7 Crawford, James (or Crawforth) A. (surgeon and apothecary; apprenticed to his father, Hugh Crawford.)

1822 - 3 King, Thomas Henzell. B. CHEMIST & DRUGGIST. (Son of John King, decd.)

During the 15th century only four apothecaries, in addition to Springwell, took up the freedom. Three of them had been Springwell's apprentices. A further three apothecaries became freemen in the 16th century. The 17th century sees more apprentices and altogether 14 apothecaries became freemen, one of them at the request of the mayor. An equal number are recorded as freemen in the 18th century. By the middle of that century some of these, probably apothecaries who had served in the Navy or who had become members of the Company of Surgeons of London, were styling themselves 'Surgeon and Apothecary'. It is not surprising that John Exton, twice mayor, should have adopted that designation.

In all, three apothecaries served the office of mayor – Charles Green, 1712-13; John Exton, 1735-36 and 1750-51; and Andrew Pigge, 1746-47.

From the years 1787 to 1836, the last year covered by the *Calendar,* no apothecary or surgeon-apothecary took up the freedom. The times were changing - but in 1822-23 one *Chemist and Druggist,* Thomas Henzell King, claimed the freedom by birth, i.e. as the son of a freeman. During the 18th century the freedom of the borough was taken up by many persons in the locality who intended to make or who had made their mark nationally; one such was the Hon, Horace Walpole. Over the long period, some of the freemen named entered the Company of Merchants of Lynn.

Sources:

A Calendar of the Freemen of Lynn, 1292-1836. Published by the Norfolk and Norwich Archaeological Society, Norwich, 1913.

The Red Register of King's Lynn. ed. H. Ingelby. Kings Lynn, n.d. 2 vols.

Blomefield's Norfolk. ed. Charles Parkin. London, 1808, Vol. VIII.

'Notes on a MSS volume - Kings Lynn, 1440-1501'. J. Bulwer. *Norfolk & Norwich Arch.* 1864, 6, 217-251.

Unique features of a museum-to-be

An exciting new 200-acre "open-air" museum of industrial archaeology in process of being established at Beamish Park, co. Durham (six miles from Newcastle) will include, among apparatus and implements of many kinds, a Stockton-on-Tees pharmacy, narrowly rescued from demolition, that remained virtually unchanged from the late eighteenth or early nineteenth century (yet under only three proprietors).

Items of objects suitable for display in such a pharmacy would be welcomed by the Director, North of England Open Air Museum, Beamish Hall, co. Durham (Stanley 3586). An introductory exhibition, "Museum in the Making", is being held during the 1971 summer.

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Medicine in Chelsea

JOINT MEETING WITH OSLER CLUB

On Thursday January 20, 1972, the Society and the Osler Club are holding a joint meeting at Chelsea College of Pharmacy, Manresa Road, London, S.W.3, on medical and scientific aspects of Chelsea's history. Mr. L.G. Matthews will speak on the Royal Hospital, Chelsea; Professor E.J. Shellard on the Chelsea Physic Garden; and Dr. M.P. Earles on men and women of Chelsea associated with medicine and Science. The meeting begins at 8 p.m. and is freely open to members and friends, but before it, at 7 p.m., there is a buffet supper for which a charge of £1.50 is made, and for which prior reservation is requested so that the organisers know how many they have to cater for. Any members who have been at Osler Club suppers on previous occasions will need no telling that they are worth making an effort to attend.

Drug Jars from Hospitals and from Royal Pharmacies

R. E. A. DREY

Amongst the finest achievements of the pharmaceutical potters of Europe and of China are the earthenware and porcelain drug jars made for pharmacies attached to the monasteries, hospitals and palaces of Europe. These jars are of interest not only for their fine workmanship, but also because they generally bear the coat of arms or emblem of the hospital or court for which they were executed.

Probably the earliest drug vessels bearing a mark of ownership are the fifteenth century Florentine "oak leaf" jars, which display a ladder surmounted by a cross (the badge of the Ospedale Santa Maria della Scala in Siena), or a crutch on each handle (the emblem of the Ospedale Santa Maria Nuova in Florence). These well-known jars, examples of which are in the Victoria and Albert Museum, are illustrated and described in Bernard Rackham's *Catalogue of Italian Maiolica* and in Henry Wallis's *Oak-Leaf Jars.* Other examples of emblazoned drug jars are, however, only sparsely represented in public collections in this country, thus justifying providing justification for devoting a short article to a selection of such jars.

Figure 1 depicts what must be one of the earliest drug vessels bearing both a pharmaceutical inscription and a coat of arms. It is of Caffaggiolo manufacture and dates from about 1515. The crest is that of the Aldobrandini family of Florence; the inscription, p11. BIChIChE (pilulae Becchiche) signifies antitussive pills.

The palace and monastery of San Lorenzo del Escorial, near Madrid, had a large and well-equipped pharmacy; its drug vessels, now dispersed, are in the collection of the Hispanic Society of America, and in museums in Madrid and elsewhere. One such jar, an albarello made at Talavera, is shown in figure 2. It is of seventeenth century date and is decorated with the lion of St. Jerome and the gridiron of St. Laurence in a shield surmounted by a crown; the remainder of the surface is covered with a singular blue stippled pattern. PHILO (NIUM) PERSICUM is an opiate made from opium, hyoscyamus, Indian spikenard, white pepper, cloves, zedoary root, bole and other ingredients. The preparation, which remained in use until the eighteenth century, is named after the physician Philo of Tarsus (1st cent. B.C.) who first formulated it. Other examples of Spanish jars with monastic emblems are given in Professor Folch Jou's catalogue of the pharmaceutical pottery in the Museum of Spanish Pharmacy, Madrid *(Boletin de la Sociedad Espanola de Historia de la Farmacia,* June 1966, vol. 17, pp. 51–77).

The jar shown in figure 3 with motif of intertwined serpents, crown and triple fleurs de lys in polychrome was made for the royal Court of France; it is of Rouen manufacture and dates from the beginning of the eigtheenth century. "V. Neapolitan sim.' (unguentum Neapolitanum simplex) denotes a mercurial ointment for use against scabies, fleas and lice.

Another eigtheenth century jar of French manufacture is depicted in figure 4; it was made for the Hospital Beaujon in Paris, and bears the arms of the financier Nicolas Beaujon, the founder of the hospital. The jar is of Sceaux or Paris manufacture, and is decorated in rich polychrome hues. THERIAQ. DIAT. (Theriaca Diatessaron, literally theriac of the four ingredients) was a general purpose remedy made from gentian, aristolochia rotunda, myrrh, bay berries and honey. It lacked the viper's flesh and the other more costly ingredients of the celebrated Theriaca Andromachi, and was intended for the use of the poor.

The spouted jar shown in figure 5, also with polychrome decor, is one of a large set commissioned for the Ospedale Maggiore della Carita in Novara; it was made in Northern Italy, probably at Nove, in the eighteenth century; the inscription reads 'Ol. Vulp' (oil of foxes). A companion piece is illustrated in an article by Mrs. Lothian Short in *The Chemist and Druggist,* 1962, June 30, p.725.

The last illustration is that of a porcelain jar from a set made in China in the last quarter of the seventeenth century for the pharmacy of the Imperial Palace in St. Petersburg (Leningrad). The members of the series

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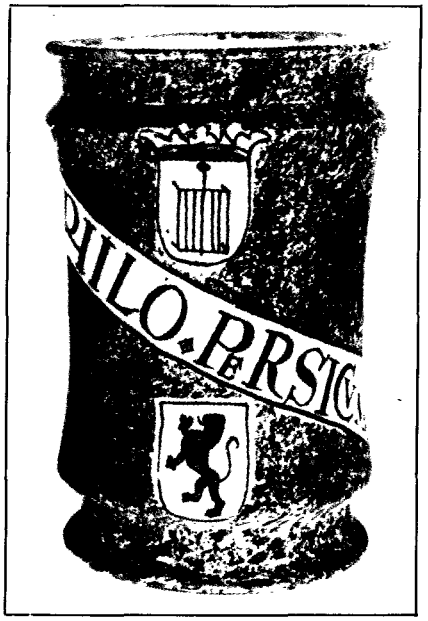
include ointment pots and syrup jars; all carry the Russian Imperial arms painted in green, red and violet; All are devoid of inscription.

A number of *Hotels-Dieu* in Central and Southern France, and some palaces in Spain and elsewhere, still possess the original jars commissioned for their pharmacies. In some dispensaries, e.g. the *farmacia* of the Royal Palace in Madrid, the vessels still contain the theriacs, ointments, electuaries, aromatic waters and medicated wines prepared many decades ago according to the recipes of the contemporary pharmacopoeias. Visits to such historic pharmacies cannot fail to be of interest to the student of pottery and to the pharmaceutical historian alike.

I wish to thank the museums and private collectors who have kindly provided photographs of drug jars in their possession.



2.
Talavera (Spain), first half of 17th century.
Height 18cm.
Museo Arqueologico Nacional, Madrid.

1.
Caffaggiolo (Italy), ca. 1515
Height 13cm.
Mr. H.E. Brocksom, M.P.S., London

3.
Rouen, beginning of 18th century.
Private collection, Paris.

4.
Paris or Sceaux, 18th century
Height 36cm.
Musee de l'Assistance Publique, Paris.

6.
China, last quarter of the 17th century.
Height 18cm.
British Museum, London

5.
Northern Italy, probably Nove, 18th century.
Height 18cm.
Museum of the History of Science, Oxford.

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Cutting the tapestry

Presidential address to the British Society for the History of Pharmacy, Exeter, April 16, 1972. A full report of the Exeter Meeting will appear in the next issue.

M.P. EARLES, B.Pharm., M.Sc., Phd.D., F.P.S.

When I was considering the subject of this address I took into account the fact that my personal contribution to the history of pharmacy has largely been in the field of materia medica and experimental pharmacology. If one subscribes to rigorous definitions of historical subjects, then much of my work falls into the history of medicine and science rather than history of pharmacy. With this in mind I decided to make the relationship between the history of pharmacy and associated disciplines the subject of my address. It was when I had looked into the subject that I decided on the title "Cutting the Tapestry" – suggested by a quotation of George Dix, "The tapestry of history has no point at which you can cut it and leave the design intelligible."

The pharmaceutical historian Julius Berendes observed that pharmacy was not itself a science but was based on a number of fields of natural science so that it was a "combination of science and art, the theoretical knowledge shaping the foundation for the practical skill". In 1923 when George Urdang, who was later to occupy the Chair in the History of Pharmacy at Wisconsin, lectured to the German Pharmaceutical Society and attempted to define history of pharmacy in order to lay a foundation for the advancement of its study, he diverged from the integrated view of the history of pharmacy and the pharmaceutical science as inferred by the definition of Berendes[1]. Urdang did not regard pharmacy as an automonous science and it therefore followed for him that the history of drugs of chemical origin was properly the concern of the historian of chemistry, whilst drugs of vegetable origin were the province of historians of botany, materia medica or pharmacognosy.

Urdang defined history of pharmacy as principally an endeavour to trace the development of drug supply in general and the pharmacist's profession in particular. It included matters such as the development of the profession, history of pharmaceutical techniques, studies of the social status of the pharmacist, the collection and study of pharmaceutical artifacts and pharmaceutical biography. The contributory sciences of pharmacy belong to the history of pharmacy only insofar as they have significance for the development of the profession. Thus the dates of the discovery of the alkaloids and their introduction into the pharmacopoeias and into medical practice are part of the factual history of pharmacy, but the studies leading to the identification and extraction of individual alkaloids are properly the business of the historian of chemistry. Likewise Salvarsan, the first effective antisyphlitic drug which was discovered by Ehrlich, and the studies of sera and vaccines, are subjects in the history of pharmacology and chemotherapy. Urdang concluded that for the history of pharmacy it is necessary "only to remember the fact of the existence of these medicinal agents, the time of their introduction into the drug armamentarium and their role in the care and provision of drugs."

When I consider this attempt to define the limits of what should be regarded as the most liberal of pharmaceutical studies, I am led to remember a remark by Samuel Johnson concerning women preachers. He compared a woman preaching with a dog walking on its hind legs: it is not done well but you are surprised it is done at all. Urdang's limitation of his subject was done well but I am no less surprised it was done at all. In fairness I admit I am judging a piece of work that was reported 50 years ago. Today we are perhaps more sensitive to the problems of narrow specialisation, and three decades after the therapeutic revolution we are less ready to

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accept pedantic differentiation between pharmacy practice and the pharmaceutical sciences.

Urdang had a legitimate motive which was to establish a well defined subject uncluttered by the intrusion of fringe interests and it is unlikely that he was ever blind to the limitations of narrow specialists. History, however, instructs us that the motives and clear-sightedness of founding fathers do not always act as sufficient defence against ill consequences of their innovations. Urdang erected a barrier around his subject, and one of the frustrations of academic life originates in the existence of such subject barriers. Subjects become defined not only by constituent subject matter but also by named teaching staff, finances and allocation of space. If the barriers are too rigidly observed they impede the development of interstitial subjects, i.e. subjects which grow naturally out of two or more disciplines (examples in modern pharmaceutical science are biopharmaceutics and physical pharmacy). Furthermore such distinctions encourage students to divide their thinking into subjects, hence the term students with minds composed of water-tight compartments – a situation roundly condemned by their teachers, who see no inconsistency in fighting tooth and nail to preserve the status quo on subject definitions.

An intricate tapestry

The truth of the matter is that once barriers are erected around a subject they persist even when attempts are made to offer a broader view. In a colloquium sponsored by the American Institute of the History of Pharmacy in 1966, when Urdang's definitions were discussed, the participants took a much broader view of the history of pharmacy, and the scope of the subject was increased by defining "border areas" and the overlap between the "domain" of pharmacy, the "domain" of chemistry and so on. One participant observed that there is a danger of taking boundaries too seriously, particularly if these boundaries are used for the exclusion of historians in different but closely related fields. Overlap was considered desirable and it was suggested that the realms of history of pharmacy and history of chemistry and history of medicine could be represented by overlapping circles. But in such a representation the barriers remain and suggest that historical disciplines are related in the manner of a patchwork quilt. I would suggest that history is of a more complex character, one more in the nature of an intricate tapestry which we wilfully cut when we impose rigidly defined limitations to historical disciplines.

I propose to illustrate the situation as I see it by reporting on a study I undertook some years ago. I live in South East London near the foot of Shooters Hill, one of the highest points in the Greater London area, rising 482 feet above sea level and giving an uninterrupted view of Highgate Hill across the Thames and the City of London[2]. Local historians of the area record a mineral spring at the foot of the hill which was closed to the public about 1850 when the War Office acquired the site for the Woolwich Military Academy. Shooters Hill is of London Clay capped with gravel. The clay hydrolyses to release magnesium and other metals which form sulphates from the sulphides it contains. It is a matter of simple deduction that the spring on Shooters Hill contains magnesium sulphate, the principal constituent of the waters of Epsom spa which became fashionable at the time of the Restoration.

John Evelyn's diary

I wanted to know if the virtues of the Shooters Hill water were known at the time when Epsom and Tunbridge Wells were fashionable, and if it had acquired more than local interest. I turned to the diary of John Evelyn who, like many men of his time, was a frequent visitor to mineral wells finding benefit in the mild purgative properties of the waters. I chose Evelyn because he often stayed in Greenwich, not far from the hill, having business concerning the building of the Hospital for Seamen. An entry for early August 1699 records a visit and a stay in Greenwich, and on August 20 the 79 years old diarist wrote: "I came from Greenwich where I had been til this day and drank the Shooters-Hill waters: returned: The weather being very fine and seasonable all the time". Obviously the spring was known to Londoners, and I was later to discover that it was already being exploited commercially at the time Evelyn made his visit. A handbill by one William Goodbird (or Godbid) dated 1673 tells of "mineral waters lately discovered upon Shooters Hill" and described as "medicinal for external griefs, the scent nitrous and bitumous, the taste brisk and partly bitterish." The bill described the site as pleasant, healthful and commodious with nearby accommodation and stableroom[3].

At this point the spring on Shooters Hill is of local interest only and by no means unique; there were many similar mineral wells or springs bubbling up from the London clay, and several are recorded around the city at this time; Kensington, Dulwich, Lambeth, Richmond, Acton and others. As far as local historians are concerned, the only other interest in the spring relates to an abortive attempt to convert Shooters Hill into a Spa in the middle of the eighteenth century.

My interest in the history of science led me along another line of investigation. At the time the Shooters Hill spring was discovered, interest was being shown in the composition of natural waters. Investigation of spa waters by Van Helmont, Libavius, Boyle and Friedrich Hoffmann had already helped to advance the techniques of analytical chemistry. An entry for 1683 in Thomas Birch's *History of the Royal Society of London,* (London 1756) records that the President and Mr Aubrey affirmed that medicated springs in Surrey and Kent as far as

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Shooters Hill were full of pyrites. In 1711 Benjamin Allen's *The Natural History of Mineral Waters* classes Shooters Hill water as containing "Salt Alkalial" and qualitative tests involving decoction of logwood, spirits of hartshorn and sal ammoniac are recorded [4].

In following up this thread in the story I became aware of one of the major problems concerning the use of natural mineral waters in therapy. It was that in order to enjoy the benefits one had to travel to the source, hence the social facilities of the fashionable spas. There had been attempts to carry the water to the less privileged people of the city, but it quickly became putrid and non-potable. Advance in the knowledge of the chemical composition of the natural waters led to two possible alternatives:

(1) to prepare artificial mineral waters by dissolving the known salts it contained in ordinary water – a method suggested in the sixteenth century by Paracelsus.

(2) to administer the extracted salt i.e. a dose of Epsom salts instead of a draught of Epsom water.

It was in relation to this that the Shooters Hill spring can be shown to have played a larger role in therapy.

The extracted salt from Epsom water was recommended towards the end of the seventeenth century by Nehemiah Grew, one time secretary of the Royal Society, Fellow of the College of Physicians, and well known for his studies of comparative anatomy and the microscopical structure of plants. In 1695 he published a short work in latin. The title translated reads *A Treatise on the Nature and Use of the Bitter Purging Salt contained in Epsom Water and similar Water*[5]. The extracted salt was a mixture and called bitter purging salt, or Epsom salt, the name given later to its principal constituent magnesium sulphate. Grew extolled the virtues of his remedy, recommending it for loss of apetite, vomiting, colic, urinary diseases including stone, diabetes, jaundice and other conditions. The mild but obvious purgative action of the salt and its association with the celebrated royal spa at Epsom meant that the medicine had some commercial potential. Grew who extracted his salt from a spring at Acton to the North and West of London, received £1 profit for every 10lbs of salt sold by his agents.

Competition

One of Grew's customers was a chymist George Moult who sold the Acton salt in his shop until he and his younger brother Francis discovered that they could extract it for themselves, for which purpose they went as far away from Grew's salt works as they could – to the South and East of London, to Shooters Hill in Kent. They apparently struck it richer than Grew. It is reported that Grew obtained 120 grains of salt per gallon. An analysis of Shooters Hill water made in 1840 by James Marsh (inventor of the celebrated Marsh test for arsenic) indicated 352 grains of salt in each gallon. Grew took out letters patent to protect his invention of making and refining the salt, and also, one presumes, to protect his investment, because his competitors had brought the price down from one shilling an ounce to threepence a pound. The Moult's however refused to acknowledge the patent and Grew never prosecuted.

A violent attack

At this point the story has little significance beyond a sordid quarrel over the rights to the profits from salts extracted from natural springs. There was, however, one other facet. Francis Moult translated Grew's latin treatise on the purging salt and a copy of this translation in the British Museum has an advertisement which indicates that the translated version was available to purchasers of the salt at the shop of Francis Moult, Chymist, at the sign of the Glauber's Head, Watling Street. This translation was the subject of a violent attack by members of the College of Physicians who described it as "highly scandalous, not only to the Author [Grew] but to the College of Physicians, and the Royal Society, whose Approbations are prefixed to his Original.....That the said Translation coming into the Hands of Quacks, Women, and all sorts of Ignorant and Adventurous People; is very Dangerous, to the Health and Lives of his Majesty's Subjects". The comment appears to be less concerned with the errors the translation was supposed to contain than with the fact that the information on the purging salt had reached a wide audience. This statement was followed by other attempts to vindicate the honour and rights of Grew and in the course of which the Moults were described as "abominable cheats" and "furnace philosophers". It might appear that Grew's colleagues and friends had over-reacted on the matter of his purging salts until one takes into account a larger quarrel then in progress. At this time the physicians were condemning the encroachment by apothecaries on their practice. Grew was a physician, the Moult's were the sons of a grocer, and called themselves "chymists". One of them, Francis, was later a member of the Socety of Apothecaries[6]. The translation of Grew's work out of the sacrosanct latin and its distribution to the public at large has to be seen as another offence against the physicians and a further threat to their control of medical practice.

In telling this relatively simple story I have tried to show how a single thread, the Shooters Hill spring, has been picked up and followed until it has become part of a major historical incident – the internecine, vituperative struggle between two factions of the medical profession. The story involves local history, history of analytical chemistry, history of pharmacy and history of medicine, but to attempt to analyse it in terms of overlapping areas of interest would be meaningless – a mere exercise in academic pedantry. In making this point it is not my

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intention to suggest that recognised subjects be abolished or that societies promoting the study of the history of pharmacy, medicine, science, etc, should almalgamate and become one. I recognise that such divisions are frequently academically as well as administratively sound. When we set them up, however, it is important that we know what we are doing and recognise the fact that in history itself these divisions do not exist. Take for example, two periods in history when the idea of a pharmacist emerges as a man in society identified by specific skills and entitled to a monopoly over the handling and supply of medicines.

In 1240 a decree was published in the Kingdom of Sicily by the Hohenstaufen Emperor Frederick II which effectively separated the practice of pharmacy from that of medicine after the Arabic pattern. Nobody would deny that this was the beginning of a recognisable profession of pharmacy in the Christian West. It was, however, no more than a law to regulate one aspect of medicine for the public good and in an earlier law in 1231 Frederick's ministers had conferred the responsibility of supervising the preparation of medicines to the doctors at Salerno. It is clearly too early to make hard and fast distinctions between medicine and pharmacy.

When in 1617 the London Society of Apothecaries was founded under the Charter of James I, the distinction between the physician and apothecary was clearly defined and the London apothecary falls neatly into Dr Urdang's definitions limiting the history of pharmacy. However, in the century that followed, as the apothecary encroached upon the practice of the physician, the distinction becomes blurred and is finally erased when the Apothecaries Act of 1815 regulated medicine, not pharmacy. The historical significance of the distinctions so finely drawn between the seventeenth century London apothecary and physician is that such distinctions between allied professions are not necessarily permanent. The historian of chemistry would argue that chemistry was a recognisable science when the Society of Apothecaries was founded. But here again it is too early to separate medicine and chemistry. This was the period of iatrochemistry, when medicine was a motivating force in the advancement of chemical knowledge.

To conclude: we live in an age of specialisation, and for many of us the study of history is a release from the burdens the system imposes. In this address I have tried to argue that while divisions between history of pharmacy, history of medicine and history of science are clearly recognisable, they should not be so pedantically established or so rigidly observed that history becomes another group of specialties and associated disciplines divorced one from another. This is because the sheer joy of historical research lies in the discovery of how a fragment is part of a pattern and the pattern a part of the design – the tapestry of history.

REFERENCES

1. George Urdang's concept of the nature and meaning of the history of Pharmacy is discussed by G. Sonnedecker, A. Berman, E.W. Stieb, D.L. Cowen and A.H. Ihde in part I of *Pharmaceutical Historiography*. Proceedings of a colloquium sponsored by the American Institute of the History of Pharmacy, Madison, 1966. The proceedings were published by AIHP, edited by A. Berman, Madison, 1967.

2. *"Shooter's Hill,* in the lower half hund. of Blackheath, Lathe of Sutton at Hone, Co. of Kent: partly in the Parish of Eltham, and partly in the Parish of Plumstead. It is 9¼ E.S.E. from St. Paul's Cathedral, London. Here is a Mineral Spring." Nicholas Carlisle, *A Topographical Dictionary of England,* London, 1808, vol.2.

3. W.T. Vincent, *Records of Woolwich District,* Woolwich, 1888, II, 642, gives the name as Goodbird. A.J. Foord, *Springs, Streams and Spas of London,* London, 1910 and Hasted's *History of Kent,* London, 1886 both refer to Godbid. The handbill is said by Vincent to be in the British Museum but a search in the Reading Room and Print room has failed to locate it.

4. Partington, *History of Chemistry,* Vol.2, 1961, gives information on the analysis of mineral waters under the following names (page numbers in parenthesis) Baccius (27), Agricola (45), Palissy (73), Fallopius (101), Paracelsus (149), Van Helmont (229), Libavius (265), Kircher (303), Boyle (507), Mayow (611), Hoffmann (691). Benjamin Allen's first work was called *Natural History of Chalybeat and Pyrging Waters of England,* London 1699. It did not contain a reference to the Shooter's Hill spring.

5. The latin title of Grew's treatise is *Tractatus de Salis Cathartici Amari in Aquis Ebeshamensibus et Hujusmodi Aliis Contendi Natura & Usu,* Londini, 1695. A reference to Grew's extraction of the salt together with a brief reference to the Moult's extraction of Shooters Hill waters is to be found in A.C. Wootton *Chronicles of Pharmacy,* London, 1910, Vol. 1 pp 344-5.

6. The brothers were the sons of P.G. Moult, Citizen and Grocer. George Moult was elected F.R.S. in 1689 and Francis Moult is listed a member of the yeomanry of the apothecaries in 1709 and 1719. A Moult was engaged in chemical operations at the Royal Society in 1685 and also in supplying the West Indian fleet with chemical remedies in 1692 (personal communication from Dr T.D. Whittet). Francis Moult's translation of Grew's *Tractatus* was titled: *A Treatise of the nature and use of the bitter purging salt contained in Epsom, and such other waters,* by Nehemiah Grew, London, 1697. A description of the activities of the Moult's is contained in a polemical work by Josiah Peter, *Truth in opposition to ignorant and malicious falsehood or a discourse written to vindicate the honour, and to assert the right of Dr Nehemiah Grew.....*etc, London, 1701. Quincy refers to the Moults as "Furnace Philosophers" and attacks them for translating Grew's lectures and bringing down the price of the salt in the fourth edition of his *The Compleat English Dispensatory,* London, 1722 pp 255-6.

7. For a discussion of the nature of pharmaceutical education introduced by Allen and Bell see:
   Earles, M.P., "The Pharmacy Schools of the Nineteenth Century" in *The Evolution of Pharmacy in Britain* ed. F.N.L. Poynter, London, 1965, p. 81.
   Earles, M.P., Pharmacy and its relation to Scientific Education in Nineteenth Century Britain, *Pharmacy in History,* 1969, ii, 43-49.

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